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MIXED USE DEVELOPMENT
LONGFORD PARK, BANBURY

Application No. 05/01337/OUT

Planning Condition 20:
Habitat Creation & Management Plan

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1. INTRODUCTION

- 1.1. Aspect Landscape Planning Ltd and Aspect Ecology Ltd have been appointed by Barratt Homes, Bovis Homes & Taylor Wimpey to produce the Habitat Creation Management Plan (HCMP) to discharge Condition 20 of the outline application 05/01337/OUT for the mixed used development at Longford Park, Banbury. The condition is as follows:

Condition 20: Habitat Creation & Management Plan

A habitat creation and management plan shall be produced, following consultation with the Local Planning Authority and wildlife organisations, and submitted to and approved in writing by the Local Planning Authority prior to any development on the site. The development shall be carried out in accordance with the approved plan to ensure that measures identified in the Environmental Statement and the nature conservation value of compensatory and retained habitats is enhanced or maintained both during works on site and in the long term.

- 1.2. The long term intention is that Cherwell District Council (CDC) will adopt all public open space and habitat creation areas within the development. As such, this document has been produced in consultation with CDC to ensure a cooperative approach between the developers and the council.
- 1.3. This visionary document aims to set out the overarching aspirations and landscape framework for the development. As a strategic document, it seeks to define the habitats to be retained and created and the subsequent management principles to ensure a long term sustainable landscape asset and to maximise biodiversity benefits. In order to ensure clarity and consistency, this HCMP sets out to fulfil the relevant planning condition and the requirements of the Environmental Statement (ES). This will provide guidance for forthcoming reserved matters applications for specific phases of development and also to provide a 'User's Guide' for the management of the trees, landscape and ecological features of the site during its development and for the foreseeable future.

- 1.4. It is anticipated that each Reserved Matters Approval will contain conditions requiring more detailed information, e.g. landscape scheme to cover planning specifications, protected species mitigation strategies, arboricultural method statements etc. The management of habitats and species during works will require a number of best practice safeguards, a summary of which is provided in Appendix 3.
- 1.5. This HCMP will take the following format:
 - Aims & Objectives;
 - Background Information;
 - The Masterplan Proposals;
 - Management Principles;
 - Monitoring and Review.
- 1.6. The management principles will be presented through a holistic approach between both landscape and ecology.
- 1.7. The document will form the foundation for subsequent phase-specific Landscape and Ecology Management Plans (LEMP) in accordance with requirements of the planning permission. It is assumed that on completion of the permitted development, a full review of all documentation would be undertaken to allow for a 'drawing together' of information into a single, integrated document to guide the long term management of the site.

2. AIMS & OBJECTIVES

- 2.1. The site's current use, predominantly agricultural fields, offers limited habitats, biodiversity or community benefits. This scheme provides an opportunity for a sustainable development offering new housing, community facilities and a Community Park at the heart of the project. This extensive public amenity is led by landscape and ecologically focused design with a strong green infrastructure that offers large areas of usable and accessible open space and substantial ecological value.
- 2.2. The scheme seeks to link and bolster existing habitats within and adjacent to the site, and create a variety of habitats to both provide for the wildlife currently utilising the site and encourage new species to colonise. Both retained and newly created habitats will be managed according to ecological principles in order to provide a long term landscape and ecological asset. The Environmental Statement makes recommendations for a HCMP to ensure that the nature conservation value of compensatory and retained habitats is maintained and enhanced.
- 2.3. The ES states that the loss of any habitats should be fully compensated for, and further significantly increased by the creation of areas of new habitat. This will fully enhance the overall nature conservation value of the site and surrounding area and help in reaching Cherwell BAP targets.
- 2.4. The compensatory habitats set out within the ES at paragraph 6.94 are:
 - New native hedgerow, broadleaved woodland and tree planting.
 - Areas of semi-natural grassland of varying management regimes within the Community Park to compensate for that lost in the north of the site and enhance the site for some species of conservation concern.
 - Wetland areas adjacent to the canal, which should include areas of open water and marsh to provide areas of lower disturbance than the canal.

- Vegetated swales and periodically wet detention basins providing habitats for wildlife.

2.5. The HCMP is anticipated to cover a 15 year period, with continued monitoring as outlined in section 6.

2.6. The Key Objectives are to include:

- Exploit the natural views to and from the site
- Create a network of pedestrian and cycle linkages
- Enhance existing habitats and landscape structure
- Habitat creation to increase biodiversity value
- Generate new and attractive areas of public amenity and open space
- Provide separation but connectivity
- Embrace the canalside relationship

3. BACKGROUND INFORMATION

- 3.1. The masterplan area is located within Bodicote, immediately to the south of Banbury and is bounded by Oxford Road to the west, Bankside to the north, and fields to the east extending to the Oxford Canal. The application site area comprises 78 hectares of intensive agricultural land, with outline planning permission for mixed use development and the provision of a Community Park to maintain separation between Bodicote and Banbury.
- 3.2. The original village centre lies along Church Street in the west of Bodicote, and modern development has occurred along the routes through the historic core including East Street/ Weeping Cross and Broad Gap, and extending south as typical late twentieth century housing with a number of cul-de-sacs. To the east of Oxford Road, ribbon development in the form of bungalows and semi detached properties set back behind private roads and grass verges up to Canal Lane, beyond which lies the main extent of the development site.
- 3.3. The urban edge of Banbury lies to the north at Bankside, with an extensive network of roads, modern housing and incidental open space. The topography of the area is part of the Cherwell Valley, with dramatic views to the east across the valley which the M40 runs through north-south.

Site description

- 3.4. The land which will be occupied by the development is made up of large scale arable fields with hedgerow boundaries and individual trees. The Oxford Canal is visible within the valley, with a series of draw bridges and the tow path on the eastern side linking Banbury with the wider network of public rights of way.
- 3.5. The ES provides details on the ecological baseline situation of the site as a whole and a summary of the main habitat types and species present is provided below.

Flora

- 3.6. The site is dominated by intensive arable farmland with small areas of unmanaged grassland, typically bordered by hedgerows of varying structure and management. , and as a consequence there is overall a low floral and related faunal diversity. Several ditches / streams are associated with boundary hedgerows, and a single ephemeral pond is situated adjacent to the canal.
- 3.7. Grassland types within the site include; improved, semi-improved and marshy neutral grassland. The improved grassland is horse grazed and dominated by Perennial Rye-grass *Lolium perenne*. Semi-improved grassland is located to the north of the site and contains coarse grasses and tall ruderal species. Marshy grassland occurs between the Oxford Canal and the River Cherwell and is likely to be periodically water logged.
- 3.8. Hedgerows form the majority of field boundaries within the site. The management of hedgerows is variable with those associated with arable field compartments heavily managed. Woody species diversity is generally high and includes local species such as Midland Hawthorn *Crataegus levigata* and those of generally more calcicolous habitat such as Buckthorn *Rhamnus catharticus*, Wayfaring-tree *Viburnum lantana*, Spindle *Euonymus europaea* and Dogwood *Cornus sanguinea*. Mature standard trees are relatively infrequent with Oak *Quercus robur* and Ash *Fraxinus excelsior* present occasionally.
- 3.9. Mature trees are scattered throughout the site and are generally found in association with hedgerows as standards or along the northern section of the Oxford Canal adjacent to the site boundary. Hedgerow standards are predominantly mature Ash or Oak. Mature trees associated with the canal are confined to Crack willow *Salix fragilis* with occasional Osier *Salix viminalis* or Goat willow *Salix caprea* scrub also present.
- 3.10. The Oxford Canal supports only a limited diversity of species due to the structure of the canal (being predominantly deep, vertically sided and

containing only limited marginal vegetation) and is heavily used by boat traffic. Nonetheless the Oxford Canal is included within the Oxfordshire Wetlands Habitat Action Plan and Cherwell Aquatic Habitats Action Plan.

Fauna

- 3.11. In terms of fauna, the site supports a range of species and species groups, including Badger, Otter, bats, reptiles, invertebrates and birds.
- 3.12. A number of Badger setts occur within the site, predominantly within hedgerow bases. In addition, Badger are likely to use the hedges as foraging habitat and as commuting corridors. The vast majority of the site is unlikely to provide an important foraging resource due to the dominance of arable habitat although, some seasonal use of this habitat by Badgers may occur.
- 3.13. The nearby River Cherwell is known to be used by Otter, however, the Oxford Canal at the northern boundary of the site is not known to be used by Otter, albeit given the proximity of the River Cherwell it is possible that Otter may pass through the canal on occasion.
- 3.14. Bat surveys confirmed the presence of Common Pipistrelle *Pipistrellus pipistrellus* foraging along the canal.
- 3.15. Anecdotal evidence suggests the presence of a possible Grass Snake in the semi-improved grassland in the north of the site.
- 3.16. Invertebrate surveys of the Oxford Canal observed a total of five nymph species and three species of Odonata.
- 3.17. A total of 17 species of bird were identified within the site which represents early breeding species and residents. Areas of greatest relative bird diversity include the semi-improved fields and associated hedgerows and tall less heavily managed hedgerows.

Update Work

- 3.18. Since the original ES, further ecological survey work of the site has been undertaken for Phase 1 and the spine road reserved matters applications in 2013. The updated survey work confirms that the habitats and species present remain largely as defined previously in the ES, with no significant differences observed.

Landscape Considerations

- 3.19. The existing local landscape is already influenced by the context of Banbury's urban fringe with features of Cherwell Heights, Oxford Road, and beyond within the valley: the M40 motorway and Grimsbury Industrial Estate.
- 3.20. The site is not covered by any formal landscape designation. The creation of the masterplan ensures that built development areas are located away from the more sensitive valley slopes, which are well protected by the design proposals. The landscape character and visual integrity of the Cherwell Valley is worthy of protection and enhancement. In particular, the eastern rising flanks of the valley are attractive in their own right, and provide panoramic views across the open valley where public access exists.
- 3.21. The new development will respect the valley slopes of the Cherwell Valley with the provision of the Community Park and will create an appropriate transition between a new urban environment, and an enhanced river valley landscape character area.
- 3.22. The proposed new landscape framework will include the retention and reinforcement of these existing features together with substantial areas of new hedgerow, tree and woodland planting will provide a significant enhancement of the local landscape character. Conserving the existing vegetation, respecting the valley slopes and Oxford Canal will provide a positive contribution to the local landscape and the Cherwell Valley. The important views across the valley were identified in the ES as a

principal site feature that will require consideration in the development of the proposals.

3. THE MASTERPLAN PROPOSALS

Development Vision

- 4.1. The vision for Longford Park is stated and the principles detailed within Longford Park, Banbury Masterplan and Design Code, July 2012. This document provides the foundations from which the proposed scheme has been developed.
- 4.2. The vision within the Design Code is that Longford Park will be a place with a distinct character, which has well laid out streets and buildings, and is responsive to the local landscape and architectural setting. Longford Park will provide a wide range of important local amenities such as shops, offices, a school, and civic uses clustered in the core of the development, as well as the Community Park and play spaces in the wider masterplan area.
- 4.3. There are two main neighbourhood groups; the Plateau is located to the north eastern side of the Oxford Road and Haynesbridge is located to the south western side of the Oxford Union Canal. Each of these areas contains specific landscape features such as mature trees, hedgerows and lanes, all of which have been designed into the urban areas in a way that respects and enhances their setting.
- 4.4. The proposals have evolved from the principles and illustrative masterplan outlined within the Design Codes. The design and components of the community park have been developed in response to the Section 106 Bankside/ College Fields - Brief for Valley Side Community Park, together with the requirements outlined within the Environmental Statement, in particular the habitat creation measures (see paragraph 2.4 above).
- 4.5. In regard to the management of habitats and species during works, a number of best practice safeguards will be required. A summary of the safeguards required during works is provided in Appendix 3. The measures will need to be kept under review and informed by updated ecological surveys, where necessary, as each Reserved Matters

Application comes forward. Appropriate conditions to secure details of mitigation measures relevant to each phase will likely be imposed on each Reserved Matters approval.

The Community Park

- 4.6. The Community Park forms the heart of Longford Park. It provides a variety of environments including formal play, the canal basin setting and informal open space that offers natural slopes with long views across the Cherwell Valley. The Community Park will be the focus of the habitat creation as part of the overall masterplan. It will be a place that offers a different experience all year round. The majority of the area is made up of grasslands, hedgerows and new woodland planting. There will also be wetland areas that provide the ecological enhancement of the park.
- 4.7. The Community Park Design Principles within the Design Code document were as follows:
- Fully protects the sensitive 'valley slopes' as illustrated on the Concept Masterplan.
 - Demonstrates enhanced biodiversity and habitat creation by using the species listed in the landscape masterplan. Indicative species pallets are provided in Table 1 below.
 - Provides a restoration of the landscape with new hedgerows and woodland copses.
 - Seeks to replicate the traditional landscape character of the Cherwell Valley.
 - Provides large areas of informal open space.
 - Provides a robust structural planting framework assimilating the development into the broader landscape.
 - Improves and increases accessibility with a new footway-cycleway route connecting the Haynesbridge and Plateau areas as informal routes across the Park.
 - Provides areas of active play and formal sport provision in line with the Section 106 agreement.

- Fully protects existing hedgerows and semi mature hedgerow trees.

4.8. A Character Area plan has been produced at Appendix 1 to illustrate the various character zones across the site to inform the management of habitats.

4.9. Table 1 below provides a breakdown of the character zones outlining the distinguishing features, the quality and character of each zone as well as the associated purpose within the masterplan.

Table 1: Landscape Character Zones

Character Zone	Features	Character	Purpose
Community Park			
Gateway	<ul style="list-style-type: none"> ▪ Sculptural gateway feature ▪ Framed views out across Cherwell Valley 	<ul style="list-style-type: none"> ▪ Parkland quality 	<ul style="list-style-type: none"> ▪ Emergency/ maintenance access
Woodland glade	<ul style="list-style-type: none"> ▪ Wildflower meadow with mown paths ▪ Large open expanse of space with steep topography ▪ Panoramic views across Cherwell Valley 	<ul style="list-style-type: none"> ▪ Exposed, expansive, large scale ▪ Wild and windy ▪ Steep descent 	<ul style="list-style-type: none"> ▪ Potential for grazing ▪ Habitat creation
Woodland	<ul style="list-style-type: none"> ▪ Meandering informal footpath through trees ▪ Swaths of bluebells 	<ul style="list-style-type: none"> ▪ Enclosed, sheltered ▪ Steep descent 	<ul style="list-style-type: none"> ▪ Habitat creation
Lower wetlands	<ul style="list-style-type: none"> ▪ Ecological focus ▪ Visual interest 	<ul style="list-style-type: none"> ▪ Permanent water ▪ Limited access ▪ Relationship with canal 	<ul style="list-style-type: none"> ▪ SUDs ▪ Habitat creation
Events space	<ul style="list-style-type: none"> ▪ LEAP ▪ Picnic benches ▪ Amphitheatre 	<ul style="list-style-type: none"> ▪ Formal avenues of trees ▪ Relationship with adjacent residential area 	<ul style="list-style-type: none"> ▪ Parking ▪ Outdoor events space ▪ Toilets and services
Embankment	<ul style="list-style-type: none"> ▪ Central zig-zag path ▪ Land art; swaths of wildflower, bulbs and ornamental shrubs ▪ Visual/ seasonal interest 	<ul style="list-style-type: none"> ▪ Expansive 	<ul style="list-style-type: none"> ▪ Habitat creation ▪ Focal interest for on looking residents ▪ Backdrop to events space
Sports pitches	<ul style="list-style-type: none"> ▪ Football pitches ▪ Play; MUGA & NEAP ▪ Bulbs and formal hedgerows 	<ul style="list-style-type: none"> ▪ Formal avenues of trees ▪ Functional amenity grass 	<ul style="list-style-type: none"> ▪ Recreational/ sports facilities ▪ Access to residential

Character Zone	Features	Character	Purpose
			development <ul style="list-style-type: none"> ▪ Parking ▪ Toilets and facilities
Parkland	<ul style="list-style-type: none"> ▪ Copses and groups of individual trees ▪ Swaths of wildflower to the borders and beneath trees 	<ul style="list-style-type: none"> ▪ Parkland quality ▪ Sheltered but spacious and open 	
Linear Park inc. community orchard	<ul style="list-style-type: none"> ▪ Variety of fruit trees under planted with wildflowers meadow ▪ Mown paths ▪ Visual/ seasonal interest ▪ Play; LEAP 	<ul style="list-style-type: none"> ▪ Sheltered, enclosed ▪ More intimate, small scale ▪ Strong relationship with on looking residents 	<ul style="list-style-type: none"> ▪ Connectivity/ link to wider residential development ▪ Habitat creation
Upper wetlands	<ul style="list-style-type: none"> ▪ Ephemeral ponds ▪ Board walk ▪ Lookout tower ▪ Informal play 	<ul style="list-style-type: none"> ▪ High point 	<ul style="list-style-type: none"> ▪ SUDs ▪ Habitat creation
Development Areas			
The Plateau	<ul style="list-style-type: none"> ▪ Key hedgerows along field boundaries ▪ Linear park along Oxford Road frontage ▪ Retain hedgerow to Canal Lane 	<ul style="list-style-type: none"> ▪ Village character ▪ Parkland edges 	<ul style="list-style-type: none"> ▪ High quality development ▪ Access to Country Park
Haynesbridge	<ul style="list-style-type: none"> ▪ Close to Canal ▪ Rural setting with parks to all sides 	<ul style="list-style-type: none"> ▪ Canalside character ▪ Urban/rural transition 	<ul style="list-style-type: none"> ▪ High quality development ▪ Access to Country Park ▪ Sustainable location

Development Areas

4.10. The detailed design for each development phase including perimeter planting and play areas and open space will be determined with the Local Authority through the Reserved Matters process. The development areas of Longford Park are divided into two character areas due to the key differences in location, environment and topography. The two separate character areas are called the Plateau and Haynesbridge.

The Plateau

4.11. The Plateau will take the form of a village with a local centre, residential streets and a housing perimeter that will look out onto parkland. The

main street will be defined by key buildings and higher occurrence of red brick dwellings will define the route. At the local centre building heights will be higher to create a sense of enclosure to the civic space. Towards the development edges building heights and densities will be reduced creating a village edge character. Hedgerows will create an important character within the Plateau area and careful consideration will have to be given to retain key hedgerows.

Haynesbridge

- 4.12. The Haynesbridge area is located between Bankside Park and the Community Park and is close walking distance to the town centre. Its form and setting will reinforce the character of a relatively separate community as it is almost completely surrounded by parks and countryside. The canal side character will not be that typically associated with wharfs and tow paths. It will be a type of character that illustrates the transition from rural to urban. It will be valued for its quiet canal side living environment.

Habitat Creation Rationale

- 4.13. Through the development of the masterplan in liaison with the Local Authority, it is the intention that the Community Park will be divided into a number of character zones that will offer a range of enhancements that the design principles lay out.
- 4.14. The creation of a wide range of habitats will provide a local provision of accessible open space with varied experiences and habitats to explore, benefiting both the local community and the local wildlife. This rich tapestry of habitats which both embrace and enhance the setting of the proposals, will present a high degree of biodiversity and community importance.
- 4.15. Table 2 below provides a strategic framework for habitat creation within the Community Park. This will guide detail that will be required as part of conditioned by future Reserved Matters Approvals. Detailed species lists and ratios will be provided as part of the consenting process at the appropriate stage. However, the key species targeted

within the newly created and retained habitats are highlighted within Table 2. The habitat types have been selected as suitable habitats for the local area, based on those habitat types already naturally occurring and based on those likely to be sustained. The habitats have been selected based on ecological and biodiversity principles and aims which have been identified at the national level in accordance with Priority Habitats listed on the S41 list under the NERC Act 2006 and at the regional level as in the Cherwell and Oxfordshire LBAP Habitat Targets. These habitats will provide a substantial increase in habitat type and floral species diversity which will provide an increase in foraging, commuting, breeding, nesting and shelter habitat for a wide range of species.

4.16. A Habitat Management Masterplan has been included at Appendix 2.

Table 2: Habitat Types Created and Retained and Associated Flora and Fauna

Habitat Type (Possible NVC Category)	Cherwell and Oxfordshire BAP and Priority Habitat Types	Key Target Species	
		Flora	Fauna
Woodland: W3, W12, W13, W16	Lowland Beech and Yew Woodland, Lowland Mixed Deciduous Woodland, Wet Woodland	Alder, Beech, Oak, Yew, Willow	Badger, Lesser Spotted Woodpecker, Marsh Tit, Soprano Pipistrelle, Hedgehog
Broad leaf copse: W8	Lowland Mixed Deciduous Woodland	Ash, Field Maple, Hazel,	Hawfinch, Linnet, Small mammals
Hedgerow trees	-	Oak, Willow, Ash	Bullfinch, Bats
Existing trees	-	Oak, Ash, Willow	Birds, Bats, Invertebrate
Standard Trees	-	Oak, Ash, Willow, Beech	Birds, Bats, Invertebrates
Orchard	Traditional Orchard	Cherry, Apple, Pear, Walnut, Hazel, Plum	Birds, Hedgehog, Badger
Existing hedgerows	Hedgerows	Hazel, Rowan, Elder, Dog-rose, Holly, Beech	Yellowhammer, Bats, Small Mammals, Badger, Reptiles, Invertebrates

Habitat Type (Possible NVC Category)	Cherwell and Oxfordshire BAP and Priority Habitat Types	Key Target Species	
		Flora	Fauna
Proposed hedgerow	Hedgerows	Hazel, Rowan, Elder, Dog-rose, Holly, Wild Privet, English Elm ¹	Birds, Myotis Bat sp., Small Mammals, Badger, Slow-worm, White Letter-hairstreak
Shrubs	-	Hazel, Rowan, Elder, Dog-rose, Wild Privet,	Birds and Invertebrates
Wildflower grassland: MG1- MG3, MG5.	Lowland Meadow	Wild Marjoram, Wild Angelica, Meadow Sweet, Pignut, Black Knapweed	Common Lizard, White Letter- hairstreak, Badger, Birds, Bats, Harvest Mouse
Wet grassland: MG4, MG8, MG10	Lowland Meadow	Great Burnet, Meadow Sweet, Marsh Bedstraw, Soft Rush, Sedge sp., Marsh- marigold	Grass snake, Common Toad, Invertebrates, Birds
Amenity grassland: (Emorsgate seed mix - EL1, EN1, EM1, EG22)	-	Birdsfoot Trefoil, Selfheal, Crested Dog's Tail, Common Bent, Salad Burnet	Invertebrates, Birds
Attenuation pond: A22, M13, M22	Ponds	Sedge sp., Rush sp., Yellow Iris, Brooklime, Peppermint, Purple- loosestrife	Amphibians, Odonata, Birds, Daubenton Bat
Ephemeral ponds: MG4, MG6, MG8- MG10	Ponds	Sedge sp., Rush sp., Marsh bedstraw,	Reptiles, Amphibians, Invertebrates, Birds

¹ Only the strain resistant to Dutch Elm disease.

5. MANAGEMENT PRINCIPLES

5.1. As identified previously, the masterplan provides a range of habitats to enhance the landscape setting and increase biodiversity for future generations. In order for the biodiversity and landscape benefits to be realised, an appropriate management strategy will need to be implemented. Fully detailed management schedules will be prepared as each phase of development comes forward. However, Table 3 below outlines the key management principles and objectives for each habitat type.

Table 3: Habitat Management Principles and Objectives

Item	Habitat	Management Principle/Objective
1	Woodland	Rotational coppicing of understorey and occasional felling of mature trees (felled / dead wood to be left <i>in situ</i>) followed by re-planting where appropriate, to create a multifarious structure incorporating mature trees forming a closed canopy, young trees / shrubs and open rides supporting a botanically rich ground flora.
2	Broadleaf Woodland Copse	See 'Woodland' above.
3	Hedgerow trees	Minimal management where necessary to maintain healthy trees. Retain dead wood <i>in situ</i> wherever practicable.
4	Existing trees	See 'Hedgerow trees' above.
5	Proposed trees	See 'Hedgerow trees' above.
6	Community Orchard	The orchard will bolster an existing hedgerow, and will be managed to provide a balance between fruit production for the community and ecological benefit. Dead wood will be left <i>in situ</i> wherever practicable.
7	Existing hedgerows	Hedgerows should be regularly trimmed every 2 to 3 years in late winter and allowed to incrementally increase in height before being coppiced or laid approximately every 10 years. Any gaps will be re-planted. This should provide dense, well-structured and healthy hedgerows.
8	Proposed hedgerows	Once established, hedgerows should be trimmed as described in 'existing hedgerows' above to provide dense, well-structured and healthy hedgerows.
9	Shrubs	Shrubs will be managed as appropriate outside the bird nesting season (i.e. outside 1 st March to 31 st August inclusive) to maintain their health and vitality.
10	Wildflower	Wildflower grassland should be subject to a rotational management regime

Item	Habitat	Management Principle/Objective
	grassland	with some areas left long in any given year whilst others are cut, in order to maximise biodiversity. Cutting should normally take place once a year in autumn and the arisings left in situ for several days before being raked off and removed from site. Herbicides and fertilisers should be avoided entirely if practicable. This will allow wildflowers to flower and set seed, and will discourage rank growth.
11	Wet grassland	See 'wildflower grassland' above.
12	Amenity grassland	Amenity grassland should be maintained at 25mm – 75mm to provide a neat sward, and all arising removed and composted to prevent rank growth.
13	Attenuation pond	This pond will be created with sinuous margins and a long, shallow draw-down zone to maximise wildlife value. Native species should be encouraged to colonise, and invasive non-native plants should be removed. Overly dominating species can be controlled in autumn to encourage greater biodiversity of aquatic species. Waterside vegetation should be left undisturbed wherever practicable, and any vegetation clearance carried out during winter months only.
14	Ephemeral ponds	These ponds will be sown with a wet wildflower mixture (see management in 'wildflower grassland' above) and will be allowed to sporadically fill with water to provide ephemeral aquatic habitat.

5.2. In regard to the management of habitats and species during works, a number of best practice safeguards will be required. A summary of the safeguards required during works is provided in Appendix 3. The measures will need to be kept under review and informed by updated ecological surveys, where necessary, as each Reserved Matters Application comes forward. Appropriate conditions to secure details of mitigation measures relevant to each phase will likely be imposed on each Reserved Matters approval.

5.3. The detailed design including perimeter planting and furniture for the Community Park will be determined with the District Council through the Reserved Matters process. Funding for ongoing maintenance is included in the Section 106 agreement, and will be based on the Cherwell District Council's Landscape Specifications, appended at Appendix 4. This will include the maintenance schedules

6. MONITORING & REVIEW

- 6.1. The areas and habitats covered in this overarching HCMP will be subject to phase-specific LEMP's to be prepared at a later stage. These subsidiary documents will provide more detailed management plans and maintenance schedules incorporating inspection and monitoring schedules.

Monitoring

- 6.2. Monitoring is an essential part of habitat management. It enables assessment of whether the management has led to successful development of habitat that supports the anticipated flora and fauna. In the event that monitoring reveals that the habitats are not in a condition that is beneficial to biodiversity then it will be necessary to modify the management practises or to take remedial action. It may be that the aims of the habitat management have to be altered to take account of the final conditions on the site.
- 6.3. Monitoring is to be carried out by a suitably qualified person.

Review

- 6.4. In order to assess that the management aims are being met, the management activities will be subject to regular review. The management plan will be reviewed annually for the first five years of management activity, to ensure that the broad aims and objectives are being met. Following this, it is suggested that the plan is reviewed in years seven, ten, 12, and 15 for the duration of the management plan (considered to be 15 years minimum). The habitats within the site will need to be managed for the life of the development, thus new plans will be produced on a fifteen year cycle. The actual mechanism for review of the management plan will be agreed with the LPA and key stakeholders.

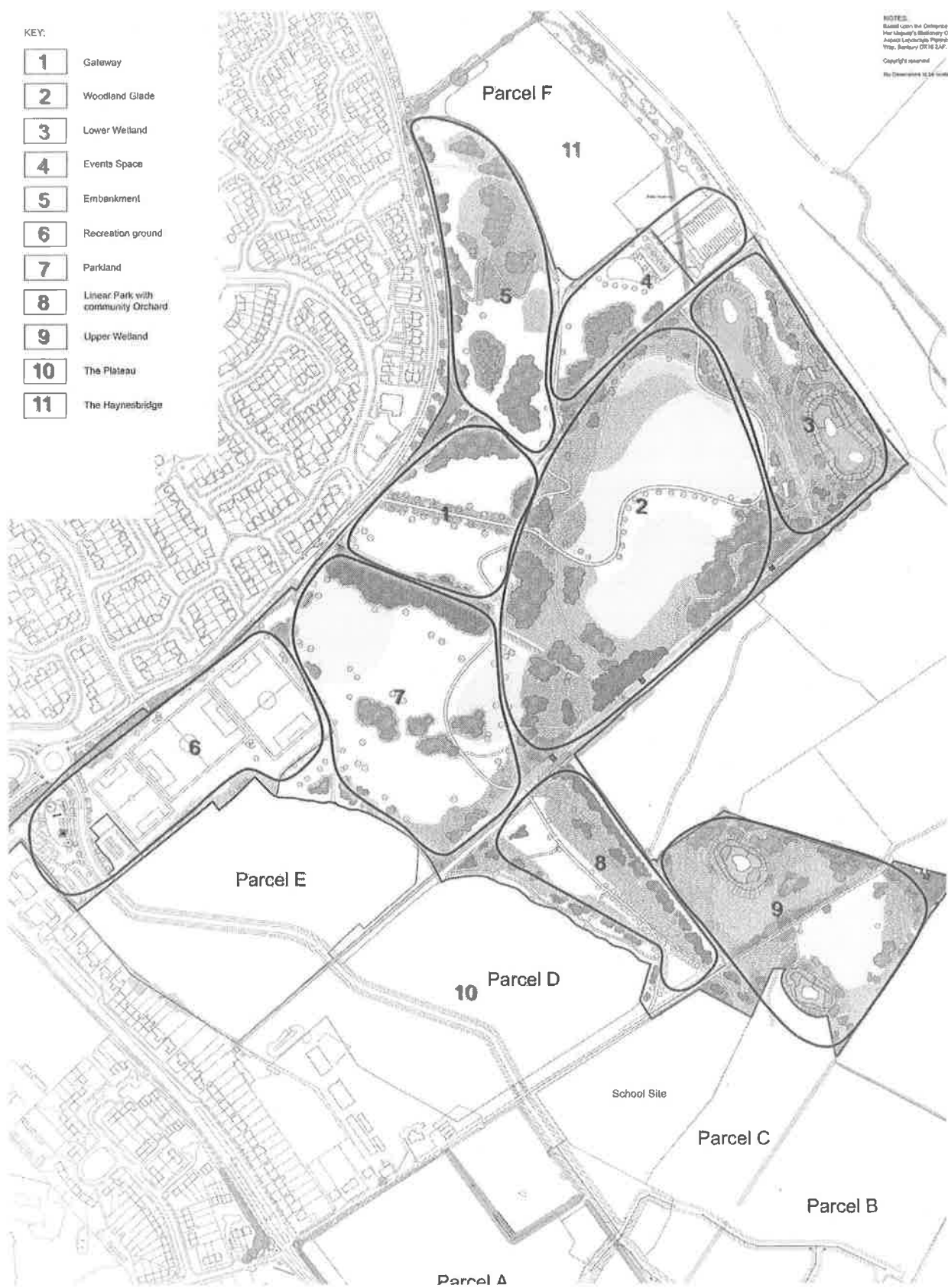
APPENDIX 1

Character Areas

KEY:

- 1** Gateway
- 2** Woodland Glade
- 3** Lower Wetland
- 4** Events Space
- 5** Embankment
- 6** Recreation ground
- 7** Parkland
- 8** Linear Park with community Orchard
- 9** Upper Wetland
- 10** The Plateau
- 11** The Haynesbridge

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REV	DATE	BY	CHKD

aspect landscape planning

TITLE
 Longford Park, Banbury
 Character Areas

CLIENT
 Barron Homes, Bovis & Taylor Wimpey Homes

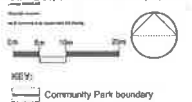
SCALE	DATE	DRAWN
1:2000 @ A1	FEB 2014	SB
DRAWING NUMBER	REVISION	
5205/ASP2/A1	B	

APPENDIX 2

Habitat Management Masterplan

- 101 100% Tree Removal - All trees to be removed within 1 year of construction
- 102 100% Tree Removal - All trees to be removed within 2 years of construction
- 103 100% Tree Removal - All trees to be removed within 3 years of construction
- 104 100% Tree Removal - All trees to be removed within 4 years of construction
- 105 100% Tree Removal - All trees to be removed within 5 years of construction
- 106 100% Tree Removal - All trees to be removed within 6 years of construction
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- 146 100% Tree Removal - All trees to be removed within 46 years of construction
- 147 100% Tree Removal - All trees to be removed within 47 years of construction
- 148 100% Tree Removal - All trees to be removed within 48 years of construction
- 149 100% Tree Removal - All trees to be removed within 49 years of construction
- 150 100% Tree Removal - All trees to be removed within 50 years of construction

NOTE: All trees to be removed shall be removed within the specified time frame. The time frame shall be determined by the local jurisdiction. The time frame shall be determined by the local jurisdiction. The time frame shall be determined by the local jurisdiction.



Scale: 1" = 20'

Community Park boundary

- Character Areas**
- 1- Woodland
 - 2- Broadleaf
 - Woodland Cops
 - 3- Hedgerow Trees
 - 4- Existing Trees
 - 5- Proposed Trees
 - 6- Community Orchard
 - 7- Existing Hedges
 - 8- Proposed Hedges
 - 9- Shrubs
 - 10- Wildflower Grassland
 - 11- Welland Grassland
 - 12- Amenity Grassland
 - 13- Attenuation Pond
 - 14- Ephemeral Ponds



aspect
 P
 Benhale, Longford Park
 Community Park - Overview
 Date: Taylor Wherry, Benhale
 Project Name: Benhale
 Date: 11/20/2014
 Project No: 102114
 Scale: 1/8" = 10'
 Drawing No: 8200/ASP2 A1

APPENDIX 3

Protection of Ecological Resources

Appendix 3 Protection of Ecological Resources during Works.

1. General Construction Safeguards

- 1.1 All chemicals, oils, fuels and other potential contaminants shall be stored in bunded tanks or structures in order to minimise the risk of a pollution event occurring.
- 1.2 A surface water management scheme will be implemented where appropriate to ensure that soil, ground water and water courses are not degraded.
- 1.3 Dust monitoring will be undertaken during construction. If a rise in dust above background levels is detected then immediate dust suppression measures will be implemented.
- 1.4 Noise control and abatement measures will be implemented, which will include the restriction of noisy construction activities during night time hours.

2. Trees and Hedgerows

- 2.1 Trees and hedgerows identified for retention will be protected using standard working practices, such as protective fencing, in line with relevant specifications stated in arboricultural best practice guidelines (BS5837), consistent with the Arboricultural Method Statement applicable to each phase.

3. Canal

- 3.1 The Canal will be safeguarded in line with the measures set out in section 5 of Aspect Ecology's 'River Corridor Survey Report' dated April 2013. This will include the following key measures:
 - Prior to the commencement of any works to the canal, including any associated vegetation clearance, a suitably qualified ecologist will conduct a checking survey in respect of Otter and Water Vole.
 - Any removal of bankside vegetation will be undertaken by strimming under the supervision of a suitably qualified ecologist.
 - Environment Agency guidelines for working practices near watercourses will be adhered to.
 - Pollution control and abatement measures listed in the 'General Construction Safeguards' section above will also serve to protect the canal habitat.

4. Canal Lane

- 4.1 The hedgerow spanning the length of the lane will be protectively fenced prior to works in accordance with relevant arboricultural best practice safeguards.

5. Badgers

- 5.1 Monitoring checks for Badger will take place leading up to works so as to check on the status of previously identified setts and to identify any new setts which may occur. These setts can then be managed accordingly by the erection of protective fencing or by sett closure as appropriate under a Natural England Licence, where necessary. Noise abatement measures, vibration control measures and restricted hours of noisy working (i.e. no noisy working during night time hours) will minimise disturbance to Badgers.

6. Nesting Birds

- 6.1 Any trees or hedgerows to be removed/pruned in bird nesting season (March-August inclusive) will be inspected by a suitably qualified ecologist prior to felling/pruning, in order to safeguard nesting birds.

7. Reptiles

- 7.1 Prior to and during construction, areas of habitat at risk of becoming more suitable to reptiles (e.g. grassland and hedgerow margins) will be appropriately managed, where practicable. This will involve regular mowing/strimming to a low height (<150mm) which will keep the areas at a low suitability for reptiles.

8. Bats

- 8.1 Should it prove necessary to remove/prune any trees identified as having potential for roosting bats, works will need to take place in accordance with the advice of a suitably qualified ecologist, which may require particular safeguards and working practices to be implemented, e.g. soft-felling.

APPENDIX 4

Cherwell District Council's Landscape Specifications

CHERWELL DISTRICT COUNCIL

**CONTRACT FOR THE PROVISION OF
LANDSCAPE MAINTENANCE SERVICES**

1 APRIL 2012 – 31 MARCH 2015

**TECHNICAL
SPECIFICATIONS**

Cherwell

DISTRICT COUNCIL
North Oxfordshire

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SECTION 1

GRASS MAINTENANCE

COPY

1.0 MAINTENANCE OF GRASSED AREAS

1.1 General Conditions

- 1.1.1 Prior to the commencement of the works the Contractor shall have satisfied himself of the location and nature of the works. A programme of works shall be submitted to the AO to achieve this specification. The number of visits shall be spaced over each period to meet the specification mowing regime. The height of cut should be gradually lowered at the start of the season to achieve the specified standard and gradually raised towards the end of the season to allow for the slowing down of the rate of grass growth.
- 1.1.2 The Contractor shall use mowers appropriate in type, size, shape and methods of cutting for the type of work involved. The Contractor shall allow in his general rates for the use of pedestrian machinery necessary to cut any steep banks found within the defined area, and ensure they are cut to the same standard as the surrounding areas. The Contractor shall ensure that all machines are set to an appropriate height for the time of year and that all blades are sharp and in good condition. Any damage from such a lack of maintenance, or incorrect setting, shall be made good by the Contractor in accordance with the contract conditions contained within this Tender to the full satisfaction of the AO.
- 1.1.3 The Contractor shall at all times during the Contract ensure that machines are properly guarded and maintained so as to present no danger to the operator or any person in the vicinity of operations. The Contractor shall provide his staff with all necessary safety equipment and shall ensure that staff use these at all times they are engaged in work on Council sites.
- 1.1.4 The entire area of grass shall be cut to an even length to the appropriate specification; leaving no areas uncut between each pass, and taking care to cut as closely as possible around obstructions and to the entire boundary of the site. All moveable obstacles within the grass area shall be moved so that all the areas can be mown into one operation, and after each mowing cycle returned to their original position. Any follow up strimming works required shall be completed within 8 working hours of the cut taking place.
- 1.1.5 Where indicated in the schedules the edges to borders, beds and hard surfaces shall be clipped at the same time as cutting. On general amenity areas this can be carried out using mechanical means, however, on high profile amenity areas this operation shall be carried out using long handled shears.
- 1.1.6 Should the Contractor cause damage to the surface or levels of the ground, or create divots during grass cutting operations, the Contractor shall reinstate such damage to the satisfaction of the AO. Should the Contractor fail to carry out such works within the time period allowed within the tender, the AO may instruct other persons to carry out the work, the costs of these works being charged to the Contractor.
- 1.1.7 The Contractor shall make good at his own expense any damage caused to walls, fences, furniture, bins, trees, grave stones, manhole covers and

other obstructions during grass cutting operations. Should it be determined by the AO that the failure of a planted tree or shrub is due to damage inflicted by negligent grass cutting, the Contractor shall be required to replace the tree or shrub with the same species, age and shape at his own expense to the full satisfaction of the AO.

- 1.1.8 Prior to mowing, all litter, stones and other debris, irrespective of its source shall be cleared from the grassed area and disposed of by the Contractor to an approved recycling centre at his own expense.
- 1.1.9 Clippings shall be evenly distributed across the surface of all grass areas, except where they are to be boxed off. All adjacent hard surface areas shall be left clear of any grass clippings and debris, and left in a safe and tidy condition prior to leaving the site.
- 1.1.10 Mechanical air blowers may be used when conditions are dry and are appropriate, as defined in BS7370 part 2 (1994), as a substitute for sweeping. However, they must not be used:
- a) Between the hours of 18.00 and 07.30 inclusive
 - b) In wet conditions
 - c) In areas where they are likely to cause a nuisance (e.g. in close proximity to housing, in elderly persons dwelling gardens, or close to schools)
- 1.1.11 The AO reserves the right to instruct the Contractor to cease the cutting of grass on any site, or in total, should weather conditions, in the opinion of the AO, result in the cessation of grass growth.
- 1.1.12 During periods when conditions are so wet as to prevent grass cutting occurring without causing damage to the surface or levels of the ground, or producing divots, the Contractor shall cease grass cutting operations, notifying and seeking the approval of the AO immediately of his actions. The Contractor shall be required to resume work as soon as possible in accordance with the schedule and catch up with any work not completed to the required standard within a time deemed as reasonable by the AO.
- 1.1.13 During the period of the Contract no growth regulators or herbicides shall be applied to any area of turf without the AO sanctioning such an operation.
- 1.1.14 Areas where flowering bulbs have been naturalised shall be left uncut for a minimum period of six weeks and a maximum of eight weeks, after flowering has finished. Following instructions from the AO, the Contractor shall then cut such areas in order to return them to the same standard as found in the surrounding areas. All arisings shall be removed from site. The Contractor shall make allowance for this operation in his general rates for grass cutting. This shall also apply to any "new" areas of bulb planting which may take place during the Contract period.

- 1.1.15 In areas where moles are active, the Contractor shall distribute the soil evenly around the surrounding area from the molehill prior to mowing. If requested by the AO, the Contractor shall remove the soil off the site.
- 1.1.16 Whilst mowing within cemeteries, due consideration shall be given at all times, to members of the public visiting graves as well as to the protection of the grave stones themselves. The Contractor should be prepared to adjust his work programme accordingly. All mowing shall cease to allow for funerals to take place. All manpower and machinery to be withdrawn from the area of the burial until the mourners have left the cemetery.
- 1.1.17 During the winter months on high profile amenity areas the contractor will edge back grass areas where they meet hard surfaces. A half moon edging iron shall be used to cut the turf back to the kerb/path edge. A line or edging board shall be used where appropriate and all curves shall be clean, free flowing lines. As part of the edging operation any weed growth on path edges, gutters etc. and adjacent to the grass area shall be scraped out and removed, unless otherwise instructed by the AO.
- 1.1.18 Where application of herbicide to obstacles or selective weed killing is specified, to take place in respect of grassed areas; operations shall be carried out twice a year with reference to specification 5 Chemical Applications.
- 1.1.19 Where a fertiliser is specified under maintenance of high profile amenity areas, the contractor shall apply a liquid fertiliser, with the make up of 12N-0P-2K-2Fe+0.5mg or similar, approved by the AO. This shall be applied to the manufactures recommendations in the second week of June prior to anticipated rain. To prevent scorching the contractor should include the possibility that hand watering may be required.
- 1.1.20 In addition to the general requirement to remove leaves prior to mowing, where leaf removal is specified as an included operation, during the Autumn months the contractor will be required to remove any build up of leaves to ensure a healthy sward is maintained, all collected leaves shall be removed from site and taken to a recycling centre approved by the AO.

1.2 High Profile Amenity Areas (A Cut)

- 1.2.1 Unless otherwise approved by the AO rear roller propelled cylinder mowers shall be used with a front roller to control the height of cut. The maximum size mower permitted on amenity box mown areas to be 600mm cutting width unless otherwise specified.

1.3 General Amenity/Verge Areas (B Cut)

- 1.3.1 On these areas to maintain a high standard of finish a mixture of both cylinder, rotary or mulch/recycling mowers may be used to ensure the specified standard is achieved. This can be dependant on the size of area being cut, conditions, and the time of year, i.e. the need to control bents.

1.4 Sports Pitch Areas (C Cut)

1.4.1 Tractor drawn or ride on cylinder mowers shall be used on Football and Rugby pitches, however, a cut and collect machine will be used for the athletics facility.

1.5 Flailed Areas (D Cut)

1.5.1 A rear or side mounted tractor rotary/flail shall be used on these areas.

1.6 Wild Flora areas

These areas will fall into three main categories:-

1.6.1 Combination Meadow (E Cut)

1.6.1.1 Grassland areas allocated under this specification will be left to grow and flower in the early months (i.e. January to late May/early June) cut, left to grow and flower again during the summer months and then cut a second time in late September, both cuts will be on instruction from the AO. On both cuts all arisings will be removed from site and disposed of in a way approved by the AO. On both occasions the grasses will have reached a height of up to 1000mm. Recommended cutting machinery for this operation would be a reciprocating blade mower (such as an Allen scythe), which can cut the tall grassland at a single point near the ground level, thus facilitating removal of the arisings. Again, if it is the Contractor's intention to bale the "hay crop" to facilitate removal, any income arising from the sale of the hay will accrue to the Contractor.

1.6.2 Spring Flowering Meadow (F cut)

1.6.2.1 Grassland areas allocated under this specification will be left to grow, and flower, uncut during the spring months (i.e. left uncut from January to June each year).

1.6.2.2 On instruction from the AO a "hay crop" will be taken between mid-June/early July, the grass which has been allowed to grow in the Spring (to a height of 500-800 mm) will be cut by the Contractor to a height of approximately 100mm. When dried (no sooner than one week and no longer than two weeks after cutting) all arisings will be removed from the site and disposed of in a manner approved by the AO. If it is the Contractor's intention to bale the "hay crop" to facilitate removal, any income arising from the sale of the hay bales will accrue to the Contractor.

1.6.2.3 Recommended cutting machinery for this operation would be a reciprocating blade mower (such as an Allen scythe), which can cut the tall grassland at a single point near to ground level, thus facilitating removal of the arisings. For larger areas, agricultural cutting machinery is

recommended along the use of a forage harvester or baling machine. It is essential that the grass is properly dried before baling. Hay bales will be removed from site immediately after production.

1.6.2.4 In addition to the "hay crop" the contractor will carry out three more cuts through to the end of the growing season (i.e. August, September and October). Recommended machinery for this operation is a rear or side mounted rotary/flail. The arisings produced from this operation may be left on site.

1.6.3 **Summer Flowering Meadow (G Cut)**

1.6.3.1 Grassland areas located under this specification will be left to grow and flower during the summer months (i.e. will be left uncut from early June to late September each year).

1.6.3.2 Prior to the "hay crop" during the spring months the contractor will carry out three cuts (i.e. April, May and early June). The grass will be cut to a height of approximately 100mm, and arisings may be left on site. Recommended machinery for this operation is a rear or side mounted rotary/flail

1.6.3.3 From early June to late September the grasslands will be left uncut until a "hay crop" is taken.

1.6.3.4 On instruction from the AO, a "hay crop" will be taken by the Contractor in late September; the grass which has been allowed to grow during the summer (to a height of up to 1000mm) will be cut to a height of approximately 10cms. Recommended cutting machinery for this operation would be a reciprocating blade mower (such as an Allen scythe). When dry (no sooner than one week and no longer than two weeks after cutting) all arisings will be removed from the site and disposed of in a way approved by the AO. If it is the Contractor's intention to bail the "hay crop" to facilitate removal, any income arising from the sale of the hay will accrue to the Contractor.

1.7 Grass Maintenance Performance Schedule

Category	High Profile Amenity Areas (A Cut)	General Amenity areas/Merges (B Cut)	Sports Pitch Areas (C Cut)	Flailed Areas (D Cut)	Wild Flora Areas (E, F & G Cut)
Type of Machine	Cylinder	Cylinder/Rotary	Cylinder	Flail/Strimmer	Reciprocating/Baler/Flail
Max Permitted Length of Grass	50mm	75mm	50mm	300mm	800mm-1000mm
Length of Grass After Cutting	20mm	25mm	25mm	40mm	100mm
Distribution of Clippings	Collected	Flown	Flown Football/Rugby Collected Athletics	Flown	Collected & Flown
Edges to Borders and Beds Included	Clipped at same time of Cutting	Clipped at same time of Cutting	N/A	N/A	N/A
Operations	Removal of Litter Apply a suitable herbicide around Tree Bases, Obstacles, Fence Lines, Wall Bases Etc within Grass Maintained Areas Half Moon Edging Leaf Clearance Apply Selective Herbicide Apply Fertiliser (Spring/Summer/Autumn)	Removal of Litter Apply a suitable herbicide around Tree Bases, Obstacles, Fence Lines, Wall Bases Etc within Grass Maintained Areas	Removal of Litter Apply a suitable herbicide around Tree Bases, Obstacles, Fence Lines, Wall Bases Etc within Grass Maintained Areas Leaf Clearance	Removal of Litter Apply a suitable herbicide around Tree Bases, Obstacles, Fence Lines, Wall Bases Etc within Grass Maintained Areas	Removal of Litter

SECTION 2

**SPORTS PITCH
MAINTENANCE**

2.0 SPORTS FACILITIES

2.1 General Conditions

2.1.1 The Contractor shall allow for and provide all labour, plant, equipment and materials (except where notified) necessary to carry out the maintenance of Sports Facilities in the manner set out in the following Specification.

2.1.2 Mowing General Sports

2.1.2.1 The Contractor shall adhere to the Grass Cutting Specification for the maintenance of grass areas at Sports Facilities, Specification 1.0 and BS7370 Part 3 1991 and European equivalents.

2.1.2.2 At the request of the AO, the Contractor shall mow the pitches during periods of drought where the main objective is to remove bents. The Contractor shall cut only the pitch and 1m outside the outer edged or boundary line using an approved rotary mower. The normal period for this will be August or September, and will be instead of normal mowing detailed in Specification 1.0.

2.1.3 Marking Out General Sports

2.1.3.1 Sports facilities shall be marked and ready for use by the dates shown below (these being subject to amendment at the discretion of the AO):

	Start Date First Saturday After	Finish Date Last Friday Before
Football & Rugby	1 st August	30 th April
Athletics	1 st April	30 th September

2.1.3.2 All markings shall be carried out in accordance with the current requirements of the sport's governing body, which may be subject to change during the course of the contract. All angles and lengths should be true and lines straight.

2.1.3.3 All markings shall be carried out using materials approved by the AO, the use of creosote, lime, any pesticide or herbicide or other unapproved additive will not be permitted. All whitening shall be supplied by the Contractor, who must ensure that he is never without supplies. The Contractor shall ensure that the marking mix and the applicator are suitable for the prevailing ground and weather conditions. The Contractor shall ensure that the marking compound is of sufficient strength to persist for at least one week even under adverse weather conditions.

2.1.3.4 Wet Line marking shall be undertaken with a compound mix approved by the AO. The Contractor must, prior to the commencement of the contract, provide the AO with a list of the constituents of the Wet Line marking mix.

- 2.1.3.5 If grown conditions require or at the request of the AO, Dry Line marking shall be undertaken using material approved by the AO. The AO must be informed in advance of the commencement of work. The Contract shall use only approved dry line marking compound with binding compound included to ensure the marking compound holds on contact with a wet surface. Dry Line marking shall be paid for according to Schedule of Rates.
- 2.1.3.6 The Contractor shall ensure that no spillage of whitening occurs, and that if it does that it is promptly cleaned up at the Contractor's own expense.
- 2.1.3.7 In certain conditions where light snow or leaves would impede the line marking operation, the Contractor must clear the lines before the commencement of marking operations; this operation shall use a blower approved by the AO.
- 2.1.3.8 On pitches specified the Contractor shall overmark sports pitches either by wet or dry line markings to ensure that lines are clearly defined at all times during the playing season. The Council will not make additional payments for remarking from scratch when lines are lost owing to grass cutting operations. The AO will enforce the Default procedure to ensure full compliance with this important requirement.
- 2.1.3.9 Immediately prior to carrying out initial marking of pitches, a 500mm wide strip of grass a minimum of 250mm either side of the agreed position of the lines shall be cut to ensure that the height of sward does not exceed 20mm. The areas to be marked should be free of grass cuttings, and the Contractor should make allowance in his rates for the use of box mowers. After the initial mowing and marking out the lines will be mown out as required before, over marking, with a rotary mower as agreed and approved by the AO.
- 2.1.3.10 The Contractor will ensure that following the completion of marking out, all machines are washed out and the remaining marking compound disposed of in a safe manner with due regard to the environment.
- 2.1.4 Selective Herbicide Application General Sports
- 2.1.4.1 The Contractor shall allow for the supply and application of an approved broad-spectrum selective herbicide to grass of all sports facility locations. The herbicide shall be applied strictly in accordance with the manufacturer's instructions at the recommended rates and with full regard for the C.O.S.H.H. Regulations. All as Specification 5.0 "Chemical Applications". When using any pesticide the Contractor must have due regard for the environment, facility users, wildlife, operatives, and the facility itself. The Contractor must notify the AO in writing 24 hours before commencing the application of any pesticide. The application of pesticides shall take into account any current Council policies on the environment, which may be subject to change during the course of the Contract.

- 2.1.4.2 Each sports location shall receive one application between late April and late June inclusive. The AO must be issued with a spraying programme to ascertain when spraying operations are due to take place. Where grass seed is to be sown during the same period, the Contractor shall ensure that herbiciding is done sufficiently prior to sowing so as not to adversely affect grass seed germination. If herbicide does damage germinating grass, it must be put right at the Contractor's own expense.
- 2.1.4.3 The Contractor shall not spray in weather conditions likely to cause spray drift or when wet weather is imminent, or in particularly dry periods.
- 2.1.4.4 The grass shall not be cut within the three days either prior to or following the application of herbicide. The Contractor should be aware that fixtures are normally held on a Saturday or Sunday, and that the Contractor should check with the AO before commencing spraying to ensure that no fixtures are booked during this period.
- 2.1.4.5 The Contractor shall carry out in season maintenance to pitches in the following sequence, unless otherwise directed by the AO.
- a) Rolling
 - b) Spiking
 - c) Harrowing
 - d) Overmarking
 - e) Fertiliser Application
- 2.1.4.6 The Contractor shall ensure that any operation on the playing surface such as mowing, harrowing and rolling are programmed to be carried out when they would not adversely damage the marked out lines. If lines are affected by such operations the Contractor will be required to re-mark the lines at the Contractor's own expense.

2.2 Football and Rugby Pitches Maintenance

2.2.1 Site Inspection & Litter Picking

- 2.2.1.1 All sports pitches shall be inspected during line marking operations, once per week during the playing season (usually on a Thursday or a Friday), and made clean and tidy and ready for play. At each inspection any stones, litter and/or other debris found on the pitches or closely adjacent shall be collected and removed from site. Glass or other harmful objects shall be removed immediately, whether they are discovered during regular inspections, during other visits or brought to the attention of the Contractor by the AO.
- 2.2.1.2 At the time of marking operations, the Contractor shall carefully examine the surface to ensure that there are no holes, ruts, or any other feature likely to cause injury to facility users. In the event that any dangerous areas are found they should be immediately be rectified and filled with soil/sand and seed.

- 2.2.1.3 The next working day following the completion of a match/fixture the Contractor shall inspect the pitch and the posts. All divots shall be replaced and firmed into place to form a consistent level with the immediate surrounds. Any acts of vandalism to the pitch or related equipment must be reported by the Contractor to the AO immediately in writing.
- 2.2.1.4 All items maintained by the Contractor on this site must be inspected during other operations and any damage or irregularity reported immediately to the AO.
- 2.2.1.5 Litter picking on the site is shall be carried out in accordance with specification 6.
- 2.2.3 Rolling (Football and Rugby)
- 2.2.3.1 The Contractor shall allow for the rolling of all pitches to achieve a level profile and a firm surface, to be carried out each month throughout the playing season timing to be agreed by the AO. This should be carried out with regard to the prevailing weather conditions and not when the ground conditions are unsuitable. This should be by using a tractor drawn roller at least 3m wide and weight agreed with AO and dependent on ground conditions.
- 2.2.3.2 Rolling shall be carried out in one pass in one direction longitudinally. The type of roller must be approved by the AO. Any large stones or potentially hazardous objects are to be removed from the pitch before rolling commences and taken to a designated site for disposal.
- 2.2.4 Spiking (Football and Rugby)
- 2.2.4.1 In order to give players, and in particular goalkeepers, a flat dry surface, the Contractor shall be required to aerate all Rugby and Football pitches using 100mm – 150mm spikes, hollow tines or slit tines at maximum 300mm centres to their full depth, each month throughout the playing season timing to be agreed by the AO. The machine passes must overlap by 300mm on each run. The Contractor shall submit a rate for aerating the whole pitch.
- 2.2.4.2 The spiking machinery must be approved by the AO, and works shall only be carried out when ground conditions are suitable, not when the ground is too wet, frosted or covered with snow.
- 2.2.5 Harrowing (Football and Rugby)
- 2.2.5.1 During the playing season the Contractor shall allow for the harrowing of all pitches to maintain surface levels, to be carried out each month throughout the playing season timing to be agreed by the AO.

2.2.5.2 Harrowing shall be carried out in one pass in one direction longitudinally. Harrowing machinery shall be approved by the AO.

2.2.6 Overmarking (Football and Rugby)

2.2.6.1 The Contractor shall overmark all of the football and rugby pitches listed weekly during the playing season. The Contractor must expect to mark the pitches between Christmas and New Year.

2.2.6.2 As most matches are played on weekends, overmarking will be carried out in either Thursday or Friday each week. The Contractor shall ensure that the pitches measurements remain accurate during the marking process. Throughout the season, all lines shall be clear and true.

2.2.7 Fertiliser Application (Football and Rugby)

2.2.7.1 The Contractor shall inform the AO in writing 24 hours before the commencement of fertiliser applications. The Contractor shall submit samples, for approval by the AO, of the fertiliser he intends to apply to the pitches before the commencement of operations.

2.2.7.2 The Contractor will supply and apply to the surface of the pitches in April an approved application of Spring and Summer fertiliser of the ratio 20:10:10 N: P: K at a rate of 25g/m².

2.2.7.3 In September an application of Autumn and Winter fertiliser of the ratio 4:7:7 N: P: K shall be applied at the rate of 35/m².

2.2.7.4 It must not be applied in windy conditions or periods of drought. Applications should be made when rain is imminent; otherwise the area must be irrigated at the Contractor's own expense to avoid fertiliser scorch. The fertiliser shall be evenly spread over the whole surface of the playing area, ensuring that there are no gaps between passes or overlap occurs. This shall be by mechanical means approved by the AO, except for any areas, which have recently been re-seeded.

2.2.8 Sanding and Forking

2.2.8.1 At the request of the AO the Contractor will be required to aerate worn areas such as the goal mouths (35m²) and centre spot areas, as directed by the AO. Payment for this element of work will be on the basis of area treated, and rates contained within the Schedule of Rates.

2.2.8.2 The application of sand shall be requested by the AO for the purpose of counteracting wet ground conditions. The main period for sanding shall be between weeks 45-08 but the Contractor must ensure that he has supplies for sand available at all times and at short notice.

2.2.8.3 On receipt of an instruction from the AO, the Contractor will spread; rake or lute level approved sand to a depth of approximately 10mm on areas to be specified. The Contractor will include in his rate to fork the area prior to

applying the sand, to a depth of 150mm, at 150mm intervals, and removed without causing major disturbance to the playing surface.

2.2.8.4 Sand shall be spread to areas requested by the AO to a true and even finish and drag brushed in where necessary. Payment for this work will be on the basis of area treated at approximately 4.5kg/m², and rates contained in the Schedule of Rates, one being for an average goal mouth (25m²) and the other being for a whole pitch.

2.2.8.5 Sand for top dressing shall conform to BS7370 part 3 1991 and European equivalents and consist of the following proportions:

Category	Diameter	Percentage
Stones	> 8mm	0
Coarse Gravel	8mm – 4mm	0
Fine Gravel	4mm – 2mm	5
Very Coarse Sand	2mm – 1mm	13
Coarse Sand	1mm – 0.5mm	17
Medium Sand	0.5mm – 0.25mm	44
Fine Sand	0.25mm – 0.125mm	19
Very Fine	0.125mm – 0.05mm	2
Silt and Clay	< 0.05mm	0

2.2.8.6 The Contractor shall ensure that the addition of sand does not lead to the build-up of "shoulders", especially where it would reduce the clearance height to the goal post crossbar to below the regulation height. Action to correct such a build-up shall be at the Contractor's own expense.

2.2.9 Erection and Removal of Posts

2.2.9.1 At the finish of the playing season, as instructed by the AO, all football posts shall be labelled to ensure that they can easily be reassembled at the correct site the following season. They shall then be dismantled and transported by the Contractor and placed within an approved safe and secure storage area used by the Contractor, at the Contractor's expense and with no storage charge being made, until required for use the following season. The Contractor shall inform the AO of the storage area, which the AO may wish to inspect to ascertain the conditions of storage. "One Set" shall mean both sets of posts on one pitch.

2.2.9.2 Prior to the start of the Football playing season and timed as instructed by the AO, the Contractor shall collect, visually inspect and erect all football posts into their respective positions. Grease shall be used to ease posts into socket positions. Rugby posts are not generally to be removed, unless there is a specific request from the AO. The Contractor shall submit a Schedule of Rate for the hire of approved specialist equipment in such circumstances.

2.2.9.3 Care shall be exercised by the Contractor during the process of erecting, dismantling and storage of the posts. Any damage caused by the

Contractor to the posts or sockets shall be repaired or replaced at his own expense.

2.2.9.4 During pre-match operations, the Contractor shall regularly inspect the posts whilst they are erected: it is the Contractor's responsibility to ensure that posts remain securely fixed and maintained in a safe condition at all times. The cost of this shall be included in the rate submitted for the marking out of pitches. Any damage or fault shall be reported to the AO immediately in writing, giving full details of the observed fault or damage.

2.2.10 Painting of Posts

2.2.10.1 At the end of the season and before the football posts are dismantled, both the football and rugby posts shall be inspected by the AO to ascertain their condition and whether painting of the posts is required. The AO shall report his findings to the Contractor, and issue instructions as to which posts shall be repainted. Football posts shall be painted following their dismantling, and rugby posts shall be painted in situ.

2.2.10.2 Before painting each post shall be thoroughly washed to remove any dirt or grease. Posts shall then be brushed down by the use of a wire brush or similar implement to remove stubborn dirt, rust and flaking or loose paint.

2.2.10.3 When dry, each post shall be painted with a primer, an undercoat and when ready a gloss coat of white lead free paint approved by the AO.

2.2.10.4 Any painting shall be carried out indoors, or, particularly in the case of rugby posts, outdoors in suitable dry weather conditions but not when wet weather is imminent, or in frost. All work of this nature shall be paid in an agreed Schedule of Rates.

2.2.11 Post Sockets (Football)

2.2.11.1 Prior to the erection of the posts, the Contractor shall inspect all post sockets for signs of damage, rot, blockage, corrosion or instability, and the results shall be submitted promptly in writing to the AO. This inspection should be undertaken 6 weeks before the marking of pitches. All sockets shall be cleaned out prior to the erection of the posts. The Contractor should at this time request the AO to supply any replacement sockets required.

2.2.11.2 All new sockets shall be set in the ground according to manufacturer's instructions and the grass surrounds reinstated. Payment will be according to Schedule of Rates.

2.2.11.3 At the end of the playing season all sockets shall be sealed by a suitable method approved by the AO, to prevent soil, debris etc., clogging the sockets. The top 50mm of the sockets shall then be filled with soil to finish at ground level. The Contractor should allow in his rates for the random recovery and reinstatement of socket covers and fillings to ensure that they remain in place throughout the closed season.

2.2.11.4 If Rugby Posts are removed the Contractor shall maintain these post sockets as above.

2.2.12 Post-Season Renovation

2.2.12.1 At the completion of Football and Rugby seasons as determined for each site, the Contractor will be required to inspect in conjunction with the AO, all pitches to ascertain the renovation works necessary to goalmouths, penalty areas, and centre circles. The contractor should allow in his rates for renovating these areas. However any other area, which is showing signs of bad wear, will be paid in accordance with the schedule of rates.

2.2.12.2 It is essential that operations progress quickly, to ensure the rapid recovery of the grass sward. Consequently, on receipt of an instruction from the AO to carry out the agreed renovation works, the Contractor shall within 5 days commence the following operations, to be completed within 7 days of receipt of instructions. All materials shall be supplied by the Contractor.

2.2.12.3 The area to be re-seeded will be cultivated using approved methods and equipment; cultivation resulting in a fine tilth seedbed shall be to a depth of 50mm.

2.2.12.4 Any low areas will be in-filled using screened topsoil approved by the AO. The soil is to be levelled to give a true playing surface. The screened topsoil shall be approved by the AO. Samples shall be supplied to the AO for approval. It shall conform to BS3822: 1965 (78) or European equivalents, and shall be free of stones and other detritus.

2.2.12.5 A granular pre-seeding fertiliser will be applied to the area at the ratio of 6:9:6 N: P: K as approved by the AO at a rate of 35g/m².

2.2.12.6 The re-seeding requirement percentage for each pitch shall vary from year to year but the Contractor shall allow in his rates for reseeding a third of each pitch area at a rate of 25g/m² concentrated on the worn areas of each pitch, usually goal mouths, centre and penalty spots. The Contractor shall lightly roll to incorporate the seed into the soil. The Contractor shall allow in his renovation rate to supply and apply sufficient water to moisten the soil to a minimum depth of 50mm to ensure that a healthy sward is established ready for play the next season. The seed shall be approved by the AO, sample having been submitted to the AO for approval prior to renovation work commencing. The seed mix shall contain 80% Perennial Ryegrass and 20% Creeping Red Fescue or similar as approved by the AO.

2.2.12.7 Should, in the opinion of the Contractor, ground conditions be such that it is not possible to carry out these elements of work within the time period set, the Contractor should notify the AO as early as possible, who may at his discretion set an amended completion date, compliance with which should be treated in the same manner.

2.3 Athletics Facility

2.3.1 General Conditions

2.3.1.1 The Athletics Facility is situated at Drayton School, Drayton Road, Banbury. The Athletics facility is managed and booked by through the Council. For the purposes of this specification the Athletics area is deemed to be the whole of the open space up to and enclosed by the fence surrounding the synthetic track. The facility consists of the track, steeplechase, run-ups for long jump, high jump, triple jump and pole vault and three associated sandpits. The large grassed area enclosed by the track is used for various field events such as shot putt, javelin, hammer and discus. You will be required to carry out the following operations on the Athletics Facility.

2.3.2 Inspection & Litter Picking

2.3.2.1 All sports pitches shall be inspected during line marking operations, once per week during the playing season (usually on a Thursday or a Friday), and made clean and tidy and ready for play. At each inspection any stones, litter and/or other debris found on the pitches or closely adjacent shall be collected and removed from site. Glass or other harmful objects shall be removed immediately, whether they are discovered during regular inspections, during other visits or brought to the attention of the Contractor by the AO.

2.3.2.2 At the time of marking operations, the Contractor shall carefully examine the surface to ensure that there are no holes, ruts, or any other feature likely to cause injury to facility users. In the event that any dangerous areas are found they should be immediately be rectified and filled with soil/sand and seed.

2.3.2.3 The next working day following the completion of a match/fixture the Contractor shall inspect the pitch and the posts. All divots shall be replaced and firmed into place to form a consistent level with the immediate surrounds. Any acts of vandalism to the pitch or related equipment must be reported by the Contractor to the AO immediately in writing.

2.3.2.4 All items maintained by the Contractor on this site must be inspected during other operations and any damage or irregularity reported immediately to the AO.

2.3.2.5 Litter picking on the site is shall be carried out in accordance with specification 6.

2.3.3 Mowing

- 2.3.3.1 The Contractor shall carry out general mowing all as Specification 1 Sports pitch mowing for the Athletics Facility.
- 2.3.3.2 When crossing the artificial track with machinery, equipment or materials the Contractor must exercise extreme care not to damage the surface. If the track is damaged, the Contractor will be held responsible for any repair or replacement costs resulting. The Contractor shall take care when crossing the track not to drive over the aluminium kerbing, but shall instead cross from the track to the central grass at designated access points where removable kerbing has been installed. When crossing the track the Contractor shall include in his mowing price for the laying of polythene sheeting and approved boarding to protect the track and spread the load.
- 2.3.4 Marking Out of Grass
- 2.3.4.1 The marking out of artificial surfaces is undertaken as a separate specialist contract.
- 2.3.4.2 Prior to the commencement of the Athletics season, the Contractor shall mark out field events all as specification clause 2.1.3 ensuring all marking conform to the current AAA regulations.
- 2.3.4.3 The Contractor shall allow for the Overmarking of the Field Events markings once per week from 1st April to 30th September inclusive. This shall be on a Thursday or Friday, in preparation for weekend fixtures, unless otherwise instructed by the AO. Prior to overmarking the lines shall be mown as per specification 2.1.3.9.
- 2.3.5 Field Event Maintenance
- 2.3.5.1 The run-ups for javelin, long, triple and high jumps and the pole vault have all weather synthetic Polyflex 950-4 surfacing edged with PCC kerbing. The Throwing circles for Hammer, Discus and Shot Putt are of concrete construction. The Contractor shall edge up to concrete (e.g. kerbs, slabs, and the discus circle) using a half-moon edging iron.
- 2.3.5.2 The cleaning operations of the hard surfaces associate with the field events shall be undertaken during the "off season" as and when determined by the AO and paid for in accordance with Schedule of Rates.
- 2.3.5.3 Jumping pits shall be maintained immediately preceding the marking of Athletics Facilities. The whole pit shall have the sand weekly raked level with the pit surrounds and deleterious material (e.g. litter, stones, glass, etc.) removed. The grass, slabs or tarmac around the pits and the associated run-ups shall be swept once per week during the season.
- 2.3.5.4 The contractor shall, once per month throughout the athletics season, ensure that the surrounds of all throwing and jumping areas are cut, or edged back to ensure that the facility remains maintained in a tidy state.

Before the start of the season this shall be done with a half-moon edging iron, and on the other six occasions edging sheers shall be used. The Contractor shall supply and apply an approved herbicide once per annum to the hard surfaces around the jumps, in accordance with Specification 5.0.

- 2.3.5.5 Between weeks 10 and 12 inclusive the pits shall once per annum be completely dug and riddled as required to remove any debris and weeds. Fresh white sand approved by the AO, sample to be and supplied by the Contractor prior to purchase, shall then be added to the pits by the Contractor in sufficient quantity to bring the surface of the sand, when raked, level with the pits surrounds.
- 2.3.5.6 Once a year the Contractor shall clean all Charmin Safticurb drainage kerbs on the outside perimeter of the track by rodding and jetting and all gully pits and catchpits shall be cleared out.
- 2.3.5.7 The Contractor shall between weeks 10 and 12 inclusive supply and apply one application of herbicide to the base of the hammer and discus net, in accordance with Specification 5.0.
- 2.3.5.8 The Contractor shall once per annum supply and apply a herbicide to the track kerbing to kill the weeds/moss immediately either side of the kerbing, in accordance with Specification 5.0.
- 2.3.6 Cleaning the Athletics Artificial Surfaces
- 2.3.6.1 The Contractor shall price a rate to hose down the artificial areas using a high-pressure water hose. This work will only be carried out following receipt of written instructions from the AO. The Contractor shall allow for an annual wash down of these areas using water and a non-foaming detergent, approved by the AO, which shall be brushed onto the surface to prevent a build-up of atmospheric dirt deposits to maintain a clean appearance. This shall be paid for in accordance with Schedule of Rates.
- 2.3.6.2 The Contractor shall clean the 400m of aluminium inner kerbs monthly during the athletics season using an approved liquid detergent and a damp cloth.
- 2.3.6.3 The Contractor shall keep the artificial surfaces of the track and runways clear of grass cuttings, leaves and sand and any other debris not covered under litter as defined at 9.1.b, by fortnightly during the athletics season sweeping/vacuuming. This should be done using a stiff broom or using an approved light ride-on sweeper with rotary nylon or polypropylene bristle brushes (not with wire brushes) as appropriate. The exception to this shall be the Throwing circles (see 2.6.5.a) which shall be brushed weekly, on a Friday, from 1st April to 30th September only. Arisings will be removed to a designated site for disposal. Artificial surfaces shall be maintained by the Contractor in accordance with the manufacturer's specifications for such playing surfaces.

2.3.6.4 Care should be taken by the Contractor that machines crossing the track do not spill any petrol, diesel or other oil onto artificial surfaces. Any such deposits must be immediately removed using detergent and water, at the Contractor's own expense.

2.4 Sports Pitch Maintenance – Performance Schedule

Category Included Operations	Football & Rugby Pitches Senior	Football & Rugby Pitches Junior	Athletics Facility
Marking Out	✓	✓	✓
Selective Herbicide Application	✓	✓	✓
Inspection	✓	✓	✓
Rolling	✓	✓	
Spiking	✓	✓	
Harrowing	✓	✓	
Marking Out	✓	✓	✓
Fertiliser Application	✓	✓	✓
Checking/Cleaning Posts & Sockets	✓	✓	
Post Season Renovation	✓	✓	
Field Event Maintenance			✓

SECTION 3

**HORTICULTURAL
MAINTENANCE**

3.0 HORTICULTURAL MAINTENANCE

3.1 General Conditions

- 3.1.1 All works undertaken in the maintenance of shrubs, roses and mixed perennial borders shall be carried out in accordance with sound horticultural principles, which are acceptable to the AO. DURING ALL OPERATIONS the Contractor shall make allowance in his rates for the proper disposal of all weed growth, prunings and arisings at a recycling site approved by the AO.
- 3.1.2 During each maintenance visit all litter, non-organic material and any other debris, irrespective of its source, shall be removed from the shrub border and disposed of at an approved recycling centre at the Contractor's own expense.
- 3.1.3 Following each maintenance visit, all traces of footprints within the borders shall be removed and all adjacent hard surface areas shall be properly cleansed. Any works required to repair damaged areas resulting from the Contractor's operations shall be carried out at his own expense.
- 3.1.4 To maintain them in a weed free condition Borders indicated within the schedules shall require regular maintenance visits to remove and dispose of weed growth. This shall be achieved by a combination of shallow hoeing, hand weeding and the digging out of tap rooted perennial weeds, leaving a clean and weed free surface.
- 3.1.5 Once a year Borders indicated within the schedules shall be lightly cultivated by forking to 50mm in depth, removing all weed growth, litter and debris leaving a fine and level tilth. This operation will normally be carried out during the period January to March.
- 3.1.6 Borders indicated within the schedules shall be treated with a suitable herbicide following operation Clause 3.1.2 during the period January to March. The Contractor shall make allowance in his rates for spot treating the borders with a suitable herbicide during the growing season, any borders, not yet established require regular maintenance without the use of chemicals.
- 3.1.7 Borders indicated in the schedules shall be edged up in accordance with specification 1.0 maintenance of grass areas.
- 3.1.8 Borders indicated within the schedules shall be cut back with a half moon edging iron to a minimum depth of 75mm and slightly sloped to avoid an undercut appearance. A clean flowing edge shall be produced and the Contractor shall allow in his rates for any realignment works necessary to achieve this. The border soil shall be pushed back and left sloping at a 45-degree angle from the edge starting slightly below the surrounding levels. This operation shall normally take place once during the period January to March.

3.1.9 The contractor will during the winter months apply a layer of mulch over the entire area of Shrub Borders, Rose Beds, Perennial Borders, with the exception of Woodland Areas where the Council estimates only 50% of the area specified in the schedules is accessible to be mulched, to ensure a depth of 50mm is maintained. It is expected the majority of this material will be produced by the contractor from green waste arisings as a result of providing the service, however, any additional material required will be supplied by Cherwell District Council, delivered in bulk to the contractors depot.

3.1.10 The Contractor shall allow for four pruning visits per annum to each site listed in the schedules:

- Visit 1: February/March
- Visit 2: June
- Visit 3: August
- Visit 4: October

During each pruning visit the Contractor shall carry out all necessary works to meet the standards as set out in clauses to meet all standards as specified within the Schedules.

The specific requirements for individual genera are outlined below.

The Contractor shall satisfy himself that he is familiar with all the necessary works required for each site and submit a cost per annum for carrying out the works as set out in the schedules.

3.1.11 Pruning Schedule Descriptions

PP	Prune previous season's wood to within two to three buds of the old wood.
RO	Remove 33% of old wood, retaining younger growth but shortening the laterals.
SE	Shorten existing growth and laterals to within two/three buds of the current year's growth.
RC	Reduce canopy by 25%-33% by shortening extension growth and laterals to maintain a well-balanced and bushy habit.
DH	Deadhead after flowering.

3.1.12 Pruning Schedule

TIMING OF OPERATIONS				
Description	February/ March	June	August	October
Berberis spp	RC		SE	
Buddleia davidii	PP			
Bergenia spp		DH		
Calluna spp				DH
Caryopteris	PP			
Ceratostigma	PP			
Cornus alba	PP			
Cotoneaster spp	RC		SE	
Deutzia		DH	RO	
Elaeagnus spp	RC		SE	
Erica spp		RO		
Escallonia	RC		SE	
Forsythia				
Fuchsia	PP			
Geranium	RC			DH
Hedera			SE	
Hydrangea	DH			
Hypericum	RC			
Kerria		RO		
Lavandula	PP		DH	
Leycesteria	PP			
Ligustrum	RC		SE	
Lonicera spp (evergreen)	RC		SE	
Nepeta			DH	
Osmanthus				
Perovskia	PP	SE		
Philadelphus			RO	
Polygonum (Russian Vine)	PP		SE	
Potentilla	RC			
Prunus spp (Laurel)	RC	SE		
Pyracantha	RC	SE	SE	
Ribes		RO		
Rosa spp (groundcover & shrub)	RC		DH	DH
Salix	RC		SE	
Sambucus	PP		SE	
Santolina	PP		DH	
Senecio	RC			
Spiraea x arquata		RO		
Spiraea x bumalda	PP			

Stachys			DH	
Symphoricarpos	RC		SE	
Viburnum tinus		RC		
Weigela			RO	

3.2 Shrub Pruning

3.2.1 The objectives of pruning shall be as outlined below:

3.2.1.1 To build a strong framework, keeping plants healthy and vigorous whilst maintaining their natural shape and balance wherever possible.

3.2.1.2 To promote the maximum amount of flowering growth by the thinning out of older material along with the removal of any growth that is weak, diseased, damaged, showing signs of reversion or any suckering growth from the rootstock.

3.2.2 The Contractor shall be expected to display competence at both the theory and practice during all pruning operations.

3.2.3 Short or long handled secateurs shall be used for all deadheading or formative and restrictive pruning operations. Mechanical hedge-trimmers shall only be used when shortening soft semi-ripe lateral extension growth (e.g. Pyracantha in June/August) or for removing old flowering spikes (e.g. Lavendula in October).

3.2.4 All spent flowering growth from shrubs should be removed during the first scheduled pruning visit after flowering has finished see timing of operations chart for guide.

3.2.5 To prevent any plant, irrespective of genera, from becoming a nuisance or danger, they should be pruned to avoid interference with doorways, windows, pathways, fence-lines, car parking areas, drying areas, seats and signs. In addition any material deemed to be creating visibility problems for traffic or interfering with services shall be pruned in the interests of public safety.

3.3 Rose Pruning

3.3.1 Prune all roses indicated in the schedules during February/early March by removing all growth that is weak, dead or diseased and any suckering growth from the rootstock which should be removed as close as possible to the soil surface.

3.3.2 All remaining growth should be pruned as below:

Floribunda roses – leaving 5-7 buds per stem;

Hybrid tea roses – leaving 3-5 buds per stem;

All cuts should be made cleanly to an outward facing bud using by-pass or parrot type secateurs.

- 3.3.3 During the period June – October inclusive the Contractor shall remove all dead flowers and suckering growth.
- 3.3.4 The contractor shall ensure the health of roses by applying an approved systemic insecticide and/or fungicide to control any pests and diseases.
- 3.3.5 During the period November – December roses indicated in the schemes shall be pruned back to remove one third of the previous season's growth.

3.4 Pruning of Herbaceous Perennials

- 3.4.1 All spent flowering growth from shrubs should be removed during the first scheduled pruning visit after flowering has finished see timing of operations chart for guide.

3.5 Pruning of Hedges

- 3.5.1 All hedges as specified in the Schedules, shall be cut using secateurs, shears or reciprocating hand held cutters, dependant upon the type of hedges e.g. on laurel hedges only secateurs and long handled pruners are to be used.
- 3.5.2 The contractor should note that a tractor mounted flail approved by the Authorised Officer, may be used on hedges, which in the opinion of the Authorised Officer require any additional cuts during the winter period. All obstacles positioned or growing in these hedges should be cut around by hand to ensure the complete hedge is cut. Payment for this work will be paid for in accordance with the submitted Schedule of Rates for flail cutting.
- 3.5.3 Risk assessments of the work to be carried out must be completed by the Contractor prior to work commencing. The outcome of such assessments should be taken into account in the working procedures employed on site.
- 3.5.4 The Contractor shall provide traffic safety control in accordance with the relevant clauses of chapter 8 Traffic Signs Manual British Standard 873 1980.
- 3.5.5 Areas surrounding hedges being worked on should be coned off, and/or arrangements should be made to prevent the public gaining access to the danger zone in accordance with the relevant new Roads and Street Works Act.
- 3.5.6 The Contractor shall allow in his rates for the use of platforms, ladders etc., where required and for any difficulties of access. Where necessary he shall allow for any re-aligning of the hedge using long handled pruners where necessary to achieve a profile to the satisfaction of the Authorised Officer.

- 3.5.7 When cutting hedges the severity of cut shall be such that all growth is removed to the point of the previous cut or years growth in the cases of hedges cut only once per calendar year. On occasions the Authorised Officer may request that certain hedges be reduced in dimension; such work shall be carried out according to the Day Works in the Schedules of Rates.
- 3.5.8 The Contractor shall maintain the existing profile and height of the hedge unless otherwise instructed by the Authorised Officer.
- 3.5.9 The sides of the hedges would normally be perpendicular but the tops may be flat at 90 degrees to the sides, rounded or an arch profile.
- 3.5.10 Immediately on completing cutting, or on leaving site all arisings shall be cleared from site.
- 3.5.11 All clippings lodging in the top or sides of hedges shall be removed, hand picking as required.
- 3.5.12 During the cutting operation the herbage at the base shall be cut and all litter and debris shall be cleared from the hedge and hedge base.
- 3.5.13 An indication of timing and frequency is given below for guidance:

Code	Species	Normal No.	Timing of Cuts
Brb.	Berberis	1	July-August
Cot.	Contoneaster	1	July-August
Cup.	Cupressus/Thuja	1	July-August
Hol.	Holly	1	July-August
Lon.	Lonicera	1	July-August
Lrl.	Laurel	1	July-August
Plm	Plum	2	June & September
Bo.	Box	2	June & September
Prv.	Privet	2	June & September
Pyr	Pyracantha	2	June & September
Yew,	Yew	2	June & September
Haw.	Hawthorn/Blackthorn	1	July-September
Mix.	Mixed Hedges	1	July-September
Mix.	Mixed Hedges Housing	2	June & October

- 3.5.14 The Contractor shall be responsible for making good damage caused as a result of the operations, and be liable for the cost of replacement plant material if the Authorised Officer deems this to be necessary.

3.5.15 At certain times the Authorised Officer may instruct the Contractor to undertake additional hedge cutting operations, payment for such works shall be made in accordance with the Schedule of Rates.

3.5.16 The Schedules will specify whether a hedge is to be maintained above or below 1.8m in height.

3.6 Woodland/Tree Maintenance

3.6.1 The contractor will ensure that all areas will be kept weed and litter free.

3.6.2 All dead and vandalised trees/branches will be removed.

3.6.3 All footpaths, parking bays or any other areas specified by the Authorised Officer will be kept clear from overhanging branches at all times.

3.7 Horticultural Maintenance – Performance Schedule

Category	Shrub Borders	Rose Beds	Perennial Borders	Hedges	Woodland Areas
Included Operations					
Weed Removal	✓	✓	✓	✓	✓
Litter Removal	✓	✓	✓	✓	✓
Pruning	✓	✓	✓	✓	✓
Forking	✓	✓	✓		
Edging	✓	✓	✓	✓	
Mulch Application	✓	✓	✓		✓
Pest and Disease Control		✓			

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SECTION 4

FLORAL PROVISION

4.0 FLORAL PROVISION

4.1 General Conditions

- 4.1.1 The provision of Spring and Summer bedding displays is a key element in the District's Britain in Bloom initiatives. The Contractor will be expected to show a high degree of commitment and horticultural expertise to achieve the standards required.
- 4.1.2 The actual planting of Summer bedding will normally begin during the first week in June and Spring bedding/bulbs during the first week in October.
- 4.1.3 All plant material will be provided by the AO via an external nursery supplier. Every effort will be made to ensure that all plants specified are delivered and at the appropriate time. However, there may be occasions outside the control of the AO when plants may have to be substituted and deliveries are late arriving. The contractor will allow in his rates for staff to be available to take all such deliveries.
- 4.1.4 The timescales for completing the entire operation, before defaults are to be incurred for both Spring and Summer bedding, shall be twenty-one days after commencement. During the months of June and October Saturday shall be included as a working day and the Contractor will be expected to make appropriate provision in order to complete the operations within the timescale.
- 4.1.5 The volume of works required may vary from year to year, in accordance with the levels of sponsorship received.
- 4.1.6 The Contractor shall make provision in his rates for implementing any necessary health and safety measures that may be necessary to carry out the works in accordance with the contract conditions.
- 4.1.7 Time restrictions on maintenance/watering will apply in the three urban centre pedestrian zones; work will need to be programmed between 4.00pm and 09.00am.

4.2 GROUND BEDDING

4.2.1 Sequence for Planting - Spring

4.2.2 All Summer bedding plants to be removed for proper disposal/recycling to a site approved by the AO. All dot plants detailed for salvage shall be potted up by the Contractor as directed along with any other plants, which the AO deems to be worth saving.

4.2.3 The surface of the beds shall be evenly covered with well-rotted manure (or other organic mater approved by the AO) to a depth of 75mm. The area shall then be single dug.

4.2.4 The beds shall then be prepared for planting by treading and raking until a good tilth and smooth flowing levels are achieved. The soil at the perimeters of the beds shall be earthed up and levelled across the centre of the beds.

4.2.5 The edges of the beds shall be re-cut using a half moon, all arisings being removed from site.

4.2.6 The beds shall then be planted with plant/bulb material provided by the AO, to details/designs provided by him. All plants shall be firmed in during planting, with no roots left exposed.

4.2.7 On completion of planting all surrounding areas shall be left in a clean and tidy condition and all debris removed for proper disposal.

NB No bed shall be stripped in excess of 14 working days in advance of planting unless otherwise agreed with the AO.

4.2.8 Maintenance

4.2.9 All beds indicated within the Schedules shall be kept weed and litter free throughout the season.

4.2.10 The beds shall be kept clear of leaves from November to December.

4.2.11 The Contractor shall make allowance in his rates for the removal of the spent flowering stalks of some of the earlier flowering Spring bulbs which may be detracting from the main display. This operation shall be carried

out during routine weeding operations. All traces of footprints etc. to be removed.

4.2.12 The Contractor shall notify the AO promptly of the presence of any pest or disease attacking or infesting the plants. Upon receipt of instructions from the AO the Contractor shall within 3 working days treat such pests or diseases with chemicals as agreed with the AO.

4.2.13 Sequence for Planting – Summer:

4.2.14 All Spring bedding plants shall be removed for proper disposal/recycling to a site approved by the AO.

4.2.15 The beds shall be single dug to one spit deep; all weed growth debris etc. will be removed.

4.2.16 The beds shall then be prepared for planting by treading and raking until a good tilth and smooth and flowing levels are achieved. Any application of water to the beds at this stage to facilitate easier preparations shall be carried out at the Contractor's own expense, but by methods approved by the AO.

4.2.17 An appropriate fertiliser agreed with the AO shall be spread evenly across the surface and incorporated during the final preparations.

4.2.18 The beds shall then be planted with material provided by the AO to details/designs provided by him. All plants to be firmed in during planting.

4.2.19 The Contractor shall make provision for the staking of dot plants in the scheme using canes or other supports approved by the AO.

4.2.20 To ensure establishment the Contractor shall make provision for the initial watering in of the bedding. This shall be carried out at the Contractor's own expense and he shall be responsible for obtaining standpipes etc. where appropriate. The method of watering must be approved by the AO.

NB No bed shall be stripped in excess of 14 working days in advance of planting unless agreed with the AO.

4.2.21 Maintenance

4.2.22 All beds indicated within the Schedules shall be kept weed and litter free throughout the season.

4.2.23 All beds indicated within the Schedules shall be deadheaded between the end of June and the end of September.

- 4.2.24 All dead heads are to be removed from beds during routine weeding operations. All traces of footprints etc. to be removed.
- 4.2.25 Over periods of dry weather the Contractor will be required to water beds to ensure the survival of plant material this will need to be reflected within the Contractor's rates for summer bedding.
- 4.2.26 The Contractor shall notify the AO promptly of the presence of any pest or disease attacking or infesting the plants. Upon receipt of instructions from the AO the Contractor shall with three working days treat such pests or diseases with chemicals as agreed with the AO.

4.3 PLANTERS AND BARRELS

4.3.1 General Conditions

4.3.2 Planters and Barrels fall into the following three categories:

- A Type Planter – 1.5 Metre Square
- B Type Planter – 1.0 Metre Square
- C Type Barrel – 1.0 Metre Diameter

4.3.3 Sequence for Planting – Spring:

- 4.3.4 All Summer bedding plants to be removed for proper disposal/recycling to a site approved by the AO. All dot plants detailed for salvage shall be potted up by the Contractor as directed along with any other plants, which the AO deems to be worth saving.
- 4.3.5 The Planters and Barrels shall then be prepared for planting by forking and firming to achieve a smooth level surface. The finished soil level shall be 50mm below the perimeter edge of the planter or barrel.
- 4.3.6 The units shall then be planted with plant/bulb material provided by the AO, to details/designs provided by him. All plants shall be firmed in during planting, with no roots left exposed.
- 4.3.7 On completion of planting all surrounding areas shall be left in a clean and tidy condition and all debris removed for proper disposal.

NB No Planter or Barrel shall be stripped in excess of 14 working days in advance of planting unless otherwise agreed with the AO.

4.3.8 Maintenance

4.3.9 All Planters and Barrels indicated within the Schedules shall be kept weed and litter free throughout the season.

- 4.3.10 The Planters and Barrels shall be kept clear of leaves from November to December.
- 4.3.11 The Contractor shall make allowance in his rates for the removal of the spent flowering stalks of some of the earlier flowering Spring bulbs which may be detracting from the main display. This operation shall be carried out during routine weeding operations.
- 4.3.12 The Contractor shall notify the AO promptly of the presence of any pest or disease attacking or infesting the plants. Upon receipt of instructions from the AO the Contractor shall within 3 working days treat such pests or diseases with chemicals as agreed with the AO.
- 4.3.13 Sequence for Planting – Summer:**
- 4.3.14 All Spring bedding plants shall be removed for proper disposal/recycling to a site approved by the AO.
- 4.3.15 The top 200mm of the growing medium will be removed and replaced with a mixture compost and sterilised screened topsoil, approved by the AO.
- 4.3.16 The units shall then be prepared for planting by forking and firming to achieve a smooth level surface. The finished soil level shall be 50mm below the perimeter edge of the Planter or Barrel.
- 4.3.17 An appropriate fertiliser agreed with the AO shall be spread evenly across the surface and incorporated during the final preparations.
- 4.3.18 The unit shall then be planted with material provided by the AO to details/designs provided by him. All plants to be firmed in during planting.
- 4.3.19 The Contractor shall make provision for the staking of dot plants in the scheme using canes or other supports approved by the AO.
- 4.3.20 To ensure establishment the Contractor shall make provision for the initial watering in of the bedding. This shall be carried out at the Contractor's own expense and he shall be responsible for obtaining standpipes etc., where appropriate. The method of watering must be approved by the AO.
- NB** No Planter or Barrel shall be stripped in excess of 14 working days in advance of planting unless agreed by the AO.
- 4.3.21 Maintenance**
- 4.3.22 All Planters and Barrels indicated within the Schedules shall be kept weed and litter free throughout the season.
- 4.3.23 The Planters and Barrels indicated within the Schedules shall be deadheaded between the end of June and the end of September. Dead

heads are to be removed from each unit during routine weeding operations.

- 4.3.24 Planters and Barrels will need to be watered three times a week (Monday, Wednesday and Friday). This operation shall normally take place from mid-June until late September.
- 4.3.25 The Contractor shall allow for a high potash liquid feed, added at the manufacturer's recommended rate, to each Wednesday's watering cycle.
- 4.3.26 The Contractor shall notify the AO promptly of the presence of any pest or disease attaching or infesting the plants. Upon receipt of instructions from the AO the Contractor shall within 3 working days treat such pests or diseases with chemicals as agreed with the AO.

4.4 MODULAR FLORAL DISPLAYS

4.4.1 General Conditions

- 4.4.2 The AO will provide all the reservoir floral display units planted up and the plant material for the wire units, all delivered to the Contractors depot facilities. The Contractor will allow in his rates for staff to be available to take all such deliveries and allow for the planting up of wire units.

The floral display units will largely fall into the following categories:

- (A) Hanging Baskets 590mm (Reservoir)
- (B) Hanging Baskets 470mm (Reservoir)
- (C) Column Baskets 590mm (Reservoir)

NB (2 No. half "round the column" baskets shall be deemed to be equal to one 590mm hanging basket)

- (D) Up the Pole Baskets 590mm (Reservoir)
- (E) Barrier Unit 1270mm (Reservoir)
- (F) Barrier Basket 1270mm (Wire)
- (G) 3-tier Flower Tower 3m height (Wire)
- (H) Window Boxes (Wire)
- (I) Hay Racks (Wire)

4.4.3 Maintenance

4.4.4 Erection of Units "In Situ"

- 4.4.5 This operation will normally take place during the first two weeks of June, each unit shall be secured by:

Category (A) Fixed using metal "D Shackles"

Category (B) Fixed using heavy duty "Cable Ties"

- 4.4.6 The Contractor shall allow for the transporting of all units to site, and for the provision of any necessary hoists and other equipment necessary to secure the units.
- 4.4.7 Watering
- 4.4.8 All hanging baskets, and barrier units provided by the Council have water reservoirs, the Contractor will need to top up these reservoirs three times a week (Monday, Wednesday and Friday). This operation shall normally take place from mid-June until late September. The appropriate reservoirs shall be filled and the units shall be watered to field capacity to ensure effective capillary action.
- 4.4.9 The Contractor shall allow for a high potash liquid feed, added at the manufacturer's recommended rate, to each Wednesday's watering cycle.
- 4.4.10 Deadheading and Weeding
- 4.4.11 The Contractor shall ensure that all dead flower heads and weeds are removed on a weekly basis from mid-June until late September.
- 4.4.12 Pest and Disease Control
- 4.4.13 The Contractor shall notify the AO promptly of the presence of any pest or disease attacking or infesting the plants. Upon receipt of instructions from the AO the Contractor shall within 3 working days treat such pests or diseases with chemicals as agreed with the AO.
- 4.4.14 Removal of Units and Plant Material
- 4.4.15 During early October the Contractor shall allow for dismantling all the floral display units and returning them to a storage area specified by the AO, where they should be cleaned and carefully stored. All old plant material and organic debris shall be disposed of at a composting site approved by the AO.
- 4.4.16 Installation of Ironwork for Floral Displays
- 4.4.17 During late May the Contractor will transport from the store approved by the AO, the ironwork necessary for erecting floral poles and trees. The base plates will be removed and safely stored for re-use at the end of the season. The base of each pole will be greased prior to being properly secured into the base sockets.
- 4.4.18 Dismantling of Ironwork for Floral Displays
- 4.4.19 During October the Contractor will remove the ironwork for careful storage over winter and transport them back to the store approved by the AO.

Immediately after removal the base plates must be re-positioned and properly secured to prevent trip hazards.

4.4.20 Painting of Ironwork

4.4.21 Upon receipt of instructions from the AO the Contractor may be asked to paint all of the ironwork and poles with a Zinc based paint approved by the AO. Payment will be made in accordance with the appropriate price per item in the Schedule of Rates.

- (A) Pole Unit
- (B) Shroud Unit
- (C) Top Cluster Unit
- (D) Hanging Basket Bracket

4.5 Floral Provision – Performance Schedule

Category	Spring & Summer Bedding	Planters & Barrels	Modular Displays Reservoirs	Modular Displays Wire
Included Operations				
Planting	✓	✓		✓
Removal of Plant Material	✓	✓	✓	✓
Dead heading	✓	✓	✓	✓
Weed removal	✓	✓	✓	✓
Litter Removal	✓	✓	✓	✓
Watering	✓	✓	✓	✓
Erection of Floral Units			✓	
Removal of Floral Units			✓	
Pest and Disease Control	✓	✓	✓	✓

SECTION 5
CHEMICAL APPLICATIONS

5.0 CHEMICAL APPLICATIONS

5.1 General Conditions

- 5.1.1 This section provides the specification for all operations relating to the application of pesticides to be used during the course of the contract. As defined within the Food and Environment Protection Act 1985 the term pesticides shall be deemed to include fungicides, herbicides, insecticides, lumbricides and growth regulators within this contract.
- 5.1.2 All pesticides to be used in the undertaking of the works will be approved by the AO; no other materials shall be used on any site included within the Schedules and shall be used only for the purposes, and at the rates specified on the manufacturer's product labels.
- 5.1.3 All pesticides used, all methods of application, storage and all tanks mixes shall be strictly in accordance with the Food and Environment Protection Act (1985) (FEPA) and the Control of Pesticides Regulations (1986), made under this Act and the manufacturer's instructions. Further guidance is available in the "Code of Practice for the use of Approved Pesticides in Amenity Areas" (1988), and subsequent editions.
- 5.1.4 All operatives engaged in undertaking the application of any "Pesticide" as defined within the terms of the Act shall be in excess of 18 years of age, and shall hold a certificate from a training establishment recognised by the Minister of Agriculture as being an approved assessment centre under the terms of the Act. Prior to the commencement of the Contract the Contractor shall present to the AO proof that employees to be engaged in such work are suitably qualified and assessed and shall ensure that only those operatives are engaged in the application of such materials. In relation to this Contract only those personnel qualified will be allowed to mix and/or apply pesticides.
- 5.1.5 The Contractor shall provide his staff with all protective clothing applicable to the materials being applied at any one time, and shall give his staff access to such washing and cleaning facilities as may be required. The Contractor shall ensure that his staff whilst engaged in application of pesticides wear such protective clothing as is required, and that they observe all safety precautions as required.
- 5.1.6 The Contractor shall ensure that all materials are properly stored and transported, providing a secure store as required under the terms of the Act. Should such a store hold at any one time in excess of 200 litres of liquid material or 200kg of dry material or any combination of liquid and dry material in excess of 200 units this store shall hold a certificate approved by the Minister of Agriculture. Details of registration of the store and of the storekeepers shall be provided to the AO prior to the commencement of the Contract.

- 5.1.7 When on site the Contractor must ensure that all pesticides are stored properly in accordance with the above legislation, in a lockable container which will contain liquid gaseous leakages. Pesticides must not be stored in vehicles used as mess facilities.
- 5.1.8 The AO reserves the right to instruct the Contractor to cease any pesticide application operations if the Contractor's operatives are not wearing the appropriate protective clothing.
- 5.1.9 The Contractor shall provide and make available for inspection containers for measuring quantities of pesticides. Spray equipment shall be fitted with an approved effective guard to prevent drift onto neighbouring plants, a pressure regulating device and an approved spray nozzle of the poli-jet type as recommended by the manufacturer. Equipment shall be free of leaks, and shall be cleaned thoroughly before and after use. All machinery used in the application of materials shall be carefully maintained throughout the period of the contract to ensure correct application takes place, and that no leakage occurs.
- 5.1.10 In carrying out mixing of chemicals, the Contractor shall ensure that no spillage of chemical takes place and that no damage results to vegetation, surfaces, plants or equipment, any such damage will similarly be held to be the responsibility of the Contractor.
- 5.1.11 The Contractor shall ensure that the method of application and the undertaking of such works proceeds in such a manner as to cause no damage or injury to any desirable plant, animal, machine or item of equipment. Any such damage will be held to be the responsibility of the Contractor and he will be required to make good any damage and will be responsible for any claims for compensation arising from his actions or omissions.
- 5.1.12 The timing of work shall be such that no spraying takes place during inclement (e.g. wet or windy) weather, or when rainfall is expected in a time period which is less than that specified by the manufacturer of the chemical being used.
- 5.1.13 The Contractor shall ensure that pesticides are never left mixed in tanks overnight or unattended during the working day.
- 5.1.14 The Contractor shall ensure that the method of application and the undertaking of works do in no way lead to the pollution of any watercourse or water supply. Any such pollution will be held to be the responsibility of the Contractor and he will be required to make good any damage and will be held to be responsible for any claims for compensation arising from his actions or omissions.

- 5.1.15 The Contractor shall ensure that all-waste containers, tank washings and chemicals are correctly disposed of. Prior to the commencement of the Contract, the Contractor will present to the Authorised Officer details of the arrangements he has made for such disposal, and the Contractor will inform the Authorised Officer of any changes in these arrangements immediately they occur.
- 5.1.16 In carrying out the applications of materials the Contractor shall ensure that no area is overdosed, and that dosages of each particular treatment are in accordance with the manufacturer's recommendations, or the instructions of the Authorised Officer, and that the total area specified is treated.
- 5.1.17 Prior to carrying out any application of material the Contractor should notify the Authorised Officer of his working plans giving 2 working days notice and updating the Authorised Officer at regular intervals. The progress of such work should be reported daily using a form produced by the Contractor with a format approved by the Authorised Officer.
- 5.1.18 The Contractor shall by methods approved under the terms of the Act notify the public, neighbours of sites and the users of facilities of the fact that spraying operations are to be, are, and have been undertaken. This is especially important when spraying is programmed close to or on the pedestrian route to schools.

5.2 Herbicide Treatment around tree bases, obstacles, fence lines & walls

- 5.2.1 Where indicated in the schedules, the Contractor shall apply an approved liquid herbicide during February/March, when weather conditions are suitable, to achieve a total sprayed area of no more than 600mm diameter round each tree/obstacle and no more than a 200mm wide band along walls and fence lines.

5.3 Selected Herbicides on Turf

- 5.3.1 Where indicated in the schedules the Contractor will apply a broad-spectrum selective herbicide approved by the Authorised Officer to the areas specified within the schedule at the frequencies indicated. The Authorised Officer may at his discretion require an interim application. Payment for such work shall be paid for in accordance with rates indicated in the schedule of rates. The material should be applied at times when soil is moist and grass actively growing.
- 5.3.2 If within 10 working days of application, the Authorised Officer is not satisfied with the degree of mortality shown by broad-leaved weeds within the turf sward, the Contractor shall repeat the treatment. This shall be undertaken within 5 working days of receipt of instruction and shall be carried out at the Contractor's expense.

5.4 Treatment of Roadside Kerbs and Channels

- 5.4.1 The Kerbs and Channels adjacent to all roads included within the boundary lines of each of area, as indicated in the schedules, shall be spot treated with an approved liquid herbicide during April and September, to achieve a weed-free appearance throughout the year.

5.5 Treatment of Hard Surface / Gravel Areas

- 5.5.1 All areas, e.g. paths, drives, parking bays, other hard surfaces or gravel areas, as indicated in the schedules shall be spot treated with an approved liquid herbicide during April to September, to achieve a weed-free appearance throughout the year.

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SECTION 6
CLEANSING OPERATIONS

6.0 LITTER COLLECTION AND SWEEPING

6.1 General Conditions

6.1.1 The collection of litter is an important part of grounds maintenance operations, and shall take place throughout 52 weeks of each year, including in the week between Christmas and New Year. The Environmental Protection Act is an important piece of legislation in the area of litter collection and the Contractor shall be expected to comply with it and be fully aware of its requirements.

6.1.2 Scope of De-Littering Operations

6.1.3 All operations shall be carried out at frequencies indicated in the Schedules. All litter and debris shall be disposed of at a designated site for disposal at the Contractor's own expense. The operations broadly consist of the following:

- a) The Cleaning and Maintaining of Litter Bins.
- b) The Emptying of Litter Bins.
- c) The De-littering of shrub borders, grass areas, cemeteries, play areas, sports pitches and certain hard surface areas that appear within the scope of this Contract.
- d) The Sweeping of Hard Surface Areas by either mechanical means or by hand.

6.1.4 The Removal of Fly-tipped Rubbish.

6.1.5 Definition of Litter

a) Litter is defined as ALL extraneous materials including: paper, cans, bottles, plastic, metals, glass fragments, cigarette butts, blossom, etc.

6.1.6 Litter Bins

6.1.7 The litter bins within the District largely consist of the following types:

- a) EARTH ANCHOR
- b) GLASDON
- c) RUSTIC STYLE
- d) CONCRETE

6.1.8 The Contractor shall carry out the following maintenance to bins, and shall supply all materials required to complete the operations:

6.1.9 Lubricate locking mechanisms category every 3 months using an appropriate lubricant. Inspect the locking mechanism and report any damage to the Authorised Officer promptly.

6.1.10 Clean the outside of all litter bins category every 20 working days, using materials approved by the Authorised Officer.

6.1.11 These maintenance costs are to be included in the cost of emptying all the bins.

6.2 Empty Litter Bins

6.2.1 The Contractor shall remove all contents from litter bins, de-litter the area immediately below the bin of any small items that may have fallen through, and then ensure the bins are properly locked and secured afterwards. The Contractor shall then de-litter an area of 2m radius surrounding the litter bin immediately after emptying. All these items of rubbish shall be removed from the site with the litter emptied from the bins. The Contractor shall recycle all litter in a method approved by the AO.

6.2.2 The bins are to be emptied twice weekly (Mondays & Fridays irrelevant of bank holidays) The Contractor shall allow in his rates for the supply and installation of approved disposable black plastic liners to all litter bins to be renewed on each collection from the bins unless otherwise approved by the AO.

6.3 De-litter an Area

6.3.1 The Contractor shall scavenge for, collect and dispose of, to a recycling centre approved by the AO, all litter and debris within the areas defined in the Schedules, irrespective of its source and any other cleansing operations in adjacent areas. For the proper disposal of needles and syringes see Contract Conditions 41. Any damage caused to shrub beds, paved or grassed areas due to litter picking operations carried out by the Contractor must be made good at the Contractors own expense and to the satisfaction of the Authorised Officer.

6.3.2 Sites are to be de-littered twice weekly (Mondays & Fridays irrelevant of bank holidays) throughout the year. Each site will be de-littered on a whole-site basis.

6.4 Sweeping Footpath/Hard Surface Areas

6.4.1 Sweeping Areas

6.4.2 The Contractor shall cleanse the areas listed in the schedule by manual or mechanical means. The area should be left free of all litter, sand, soil, debris, leaf and blossom fall, along with any grass cuttings. "Sweeping" is deemed to include the raking of hoggin, gravel or similarly surfaced area, with a springbok rake or similar approved implement. The Contractor shall sweep the full length and width of an area in a methodical manner and remove all arisings from the site to an approved site for disposal. Any damage caused to surrounding areas as result of mechanical sweeping shall be made good at the Contractors own expense.

6.4.3 Mechanical air blowers may be used when conditions are dry and are appropriate, as defined in BS7370 part 2 (1994), as a substitute for sweeping. However, they **must not** be used:

- a) Between the hours of 18.00 and 07.30 inclusive
- b) In wet conditions
- c) In areas where they are likely to cause a nuisance (e.g. in close proximity to housing, in elderly persons dwelling gardens, or close to schools).

6.5 Removal of Fly-Tipped Rubbish

6.5.1 Large items of rubbish, such as discarded furniture, mattresses etc., which require two or more people to lift, and deposits of rubble, tarmac or similar, will be treated as fly-tipping. Upon discovering fly-tipping the Contractor will inform the Authorised Officer at the earliest possible opportunity. When appropriate the Authorised Officer will issue instructions to the Contractor to remove the fly-tipped material. Payment will be in accordance with schedule of rates. The Contractor will be required to submit an hourly rate for the rapid removal of tipped rubbish to a site approved by the Authorised Officer. Following such instructions from the Authorised Officer the Contractor is to ensure collection of the litter within 24 hours.

6.6 Clearance of Snow from Hard Surfaces.

6.6.1 When snow fall, heavy frost and ice occurs the contractor will be expected to suspend any other non-emergency works and make their staff, vehicles and plant available to the Council for snow clearance and to maintain a full complement of staff for this operation.

6.6.2 The AO shall identify priority snow and ice clearance areas. The contractor shall then immediately carry out snow clearance and gritting to all identified sites in order to maintain a safe and easy access, particularly for people with disabilities or who are elderly.

6.6.3 Immediately after clearance of snow, or during freezing conditions leading to the formation of ice on paths, steps and ramps, apply an application of rock salt and grit at a sufficient rate to prevent re-freezing and to provide satisfactory grip underfoot for pedestrians.

6.6.4 Take care during the application of salt and grit to avoid damage to grassed areas, trees and shrubs.

6.6.5 Supply all necessary salt and grit, maintaining an emergency supply throughout the winter period from the beginning of November through to the end of March. Make all arrangements for loading and transport to site of the material and return any surplus to storage.



SECTION 7

**AQUATIC
MAINTENANCE**

7.0 AQUATIC AREAS

7.1 General

7.1.1 The need for minimum disturbance

7.1.2 Aquatic habitats are generally rich in wildlife interest, supporting a range of specialised plants and animals, whose continued survival depends upon the maintenance of the correct conditions in and around the water. The specifications set out under this category are intended to achieve and sustain such conditions.

7.1.3 Many aquatic plants and especially animals are very sensitive even to small scale or temporary changes in their habitat. When carrying out maintenance operations in aquatic areas therefore, disturbance to the habitat will be carried out as sensitively as possible and cause the minimum disruption. In this respect, the timing of maintenance operations is crucial and operations will only be carried out during the specified periods.

7.1.4 Rubbish Removal

7.1.5 Unfortunately aquatic areas usually attract rubbish. The accumulation of rubbish in such areas is not only unsightly but is potentially a pollution hazard, particularly where chemical containers are dumped. For these reasons it is essential that rubbish is removed on a regular basis. Where there is evidence of pollution of the water this will be reported immediately to the Supervising Officer.

7.1.6 Maintenance of Artificially Lined Ponds

7.1.7 Prior to any specific maintenance operations on a pond, the Contractor will consult the Supervising Officer as to whether the pond is artificially lined or not. If this information is not readily available, the Contractor will assume that the pond does have an artificial liner and will carry his maintenance responsibilities accordingly.

7.1.8 The most common artificial liner contains of a butyl sheet sandwiched between protective layers of fibrous matting. If this membrane is cut the pond water levels will fall and in extreme cases the pond will dry up completely. It is essential therefore; that no sharp or jagged tools are used in the maintenance of artificially lined ponds. Clearly, mechanical excavators will never be used in the maintenance of such ponds.

7.1.9 The Contractor will monitor water levels in artificially lined ponds in case they have been breached accidentally or through an act of vandalism. If water levels are consistently low even after topping up, this will be immediately reported to the Supervising Officer. Similarly if any sharp object is found inserted in a lined pond (e.g. a tree stake) this will be immediately reported to the Supervising Officer.

7.1.10 Safety

7.1.11 Working in or near water presents special dangers which must be taken into account before works are organised and implemented, whilst in general most aquatic areas to which the following specifications relate are fairly shallow, it would nevertheless be advisable to ensure that anyone working in or near water is able to swim. Suitable footwear will always be worn, i.e. waders or wellington boots depending on the task. Remember that wet surfaces are slippery and will be treated with great care and the soles of footwear will provide good grip. Never wade into water without testing the depth with a wading stick (this must be a blunt stick in artificially lined ponds) and continue to test the depth at each move. Although the base may look solid, it could be a deep deposit of silt. In some cases, it may be necessary to lower water levels temporarily with a pump before carrying out maintenance operations. It is advisable that at least two people will work together at all times and that one person will remain on the bank to provide assistance should the other get into difficulties in the water.

7.1.12 For a comprehensive list of safety precautions Contractors will refer to the 'Waterways and Wetlands' handbook published by the British Trust for Conservation Volunteers (BTCV), 1981 available from:-

36 St. Mary's Street
Wallingford
Oxfordshire
OX10 0EV

7.2 General Working Practices

7.2.1 The Contractor will refer to the above practical handbook before organising and carrying out works in or near water. This handbook will be used as a guide to indicate the standards required and the detailed methods that will be used in carrying out management works in aquatic areas. These will be read in addition to the detailed requirements of the attached specifications.

7.2.2 Litter Removal: Ponds/Streams

7.2.3 Floating and submerged debris and litter will be cleared by the Contractor by non-mechanical means, removed from site and disposed of as directed by the Supervising Officer. Particular attention will be given to ensuring that the entrances to culverts are kept clear of rubbish. Care will be taken to ensure that rocks and stones in the stream channel are retained and not disturbed. These provide shelter and an anchorage for many aquatic creatures. Rubbish removed from the stream channel will be removed from the site on the same day, to prevent it being dumped or washed back into the stream.

- 7.2.4 Litter clearance will be carried out by the Contractor during each month of the year. This operation will cause the least possible disturbance to aquatic plants and animals.
- 7.2.5 Waterweed Control: Ponds/Streams
- 7.2.6 When requested by the Supervising Officer, the Contractor will clear specified vegetation from designated areas of the pond(s) and remove from site. Cleared vegetation to be left on site adjacent to pond for a minimum of 24 hours before removal from site. This is to allow time for aquatic animals caught in the vegetation to find their way back to the pond. This operation will be performed manually using nets, rakes, drag-chains or other approved methods. Under no circumstances will aquatic herbicides be used.
- 7.2.7 This operation will be carried out only in September/October.
- 7.2.8 Scrub Clearance: Ponds/Streams
- 7.2.9 When requested by the Supervising Officer, designated shrubs and trees, overhanging or adjacent to the ponds(s) the Contractor will cut back as directed by the Supervising Officer. This operation will be performed using bow-saws, pruning shears, mechanical trimmers, chain-saws or other approved mechanical means, to the satisfaction of the Supervising Officer. All cut surfaces to be left clean with no tears or jagged ends and cut faces to be at an angle to the horizontal. Arisings will be removed from site or stacked on site as directed by the Supervising Officer. This operation will be carried out during the winter months (November to March).
- 7.2.10 Sediment Excavation and Removal: Ponds
- 7.2.11 When requested by the Supervising Officer, the Contractor will excavate designated areas of sediment, debris and encroaching vegetation from the ponds(s). On artificially lined ponds this operation must be carried out manually. In naturally based ponds, the operation can be performed using approved mechanical means.
- 7.2.12 This operation will only be undertaken during the winter months (November to February). Excavated material will either be spread or mounded adjacent to the pond or removed from the site as directed by Supervising Officer. In either case excavated material is to be left adjacent to the pond for a minimum of 48 hours to enable overwintering aquatic animals to return to the water. This will also give time for the sediment to become substantially drained of water thus facilitating easier transport where it is to be removed from site. Where 7.3 has been specified, this scrub clearance operation will be undertaken first. Where it proves necessary to remove any trees or shrubs to enable excavation, the tree/shrubs to be removed must be approved and marked by the Authorised officer.
- 7.2.13 Bank Cutting

- 7.2.14 The grassed banks of streams, where indicated will be cut by the Contractor to 100mm, in height. All arisings are to be removed from site on the same day as cutting and disposed of as directed by the Supervising Officer. Cut vegetation left on site may be blown or washed into the stream channel resulting in possible blockages leading to flooding.
- 7.2.15 The vegetation needing to be cut will be at a height of some 0.5 – 1 metre and as cuttings have to be removed immediately, a reciprocating blade mower is recommended. Care will be needed in cutting steeply sloping banks. In some situations a mechanical strimmer may be more appropriate.
- 7.2.16 Prior to cutting, all litter dumped or deposited along stream banks will be removed from site.
- 7.2.17 During cutting operations care will be taken to avoid damaging trees and shrubs. Unless otherwise specified all trees and shrubs will be assumed to be retained.

7.3 Litter Removal: Ditches

- 7.3.1 Litter and other rubbish will be removed by the Contractor from all ditches manually and taken from site on the same day and disposed of to the satisfaction of the Supervising Officer. This operation will be carried out with extreme care between February and June, to minimise disturbance to amphibian life, which may be using the ditch habitat for breeding, or to get to breeding areas.

7.4 Sediment Excavation/Removal: Ditches

- 7.4.1 Where specified, the Contractor will excavate mechanically or manually, sediment and organic debris in an upstream direction (i.e. against the natural fall and flow of the ditch) using tractor and back end hoe with ditching bucket or hand tools. Excavated material is to be deposited on one bank in the ditch only, to be designated by the Supervising Officer. Care will be taken to remove only that vegetation which is impeding the drainage function of the ditch. This can be achieved by excavating from within one side of the ditch only leaving the other side undisturbed. This in turn may necessitate widening the ditch on the side to be excavated.
- 7.4.2 This operation will only be carried out during the winter months (November to February) and preferably during frosty weather and when the ground is solid so as to avoid damage to adjacent habitat by rutting from the wheels/tracks of the excavator. Care will be taken to ensure that any trees or shrubs adjacent to the ditch are not damaged during this operation. Where it proves necessary to remove any trees or shrubs to enable excavation, the trees/shrubs to be removed must be approved and marked by the Supervising Officer.
- 7.4.3 Sediment excavated from ditches is to be removed from site. Excavated material will be left on the ditch bank for a minimum of 48 hours before

removal so that overwintering aquatic creatures can find their way back to the ditch. Excavated material will be removed from site to an agreed by Supervising Officer.

7.5 Maintaining Water Levels

- 7.5.1 During the summer months, water loss from ponds by evaporation often exceeds input from rainfall and run-off. Under these circumstances water levels may fall critically low and in extreme cases may dry up altogether. This is particularly true for artificial ponds. During the peak summer months therefore, water levels in ponds will be monitored and when necessary topped-up from a convenient freshwater supply (e.g. from a standpipe). Where there is no convenient supply, a water bowser will be used.

COPY

SECTION 8

**ARBORICULTURAL
OPERATIONS**

8.0 Arboricultural Operations

8.1. General Conditions

- 8.1.1 The Contractor will adhere to all clauses within this section when carrying out arboricultural operations as specified in Section 2.
- 8.1.2 All arboricultural operations carried out within Cherwell District will be carried out in accordance with BS 3998:2010 recommendations for tree work and any future amendments to BS 3998.
- 8.1.3 When carrying out arboricultural operations any defects or potential hazards in connection with trees the Contractor will report them immediately to the Authorised Officer.
- 8.1.4 All pruning operations will take into account the natural and aesthetic appearance of the tree.
- 8.1.5 All final pruning cuts will be made outside the branch bark ridge and branch collar leaving these two areas of tissue undamaged as recommended in British Standards 3998:2010. The aim is to have a neat, circular or elliptical wound.
- 8.1.6 Employment
- 8.1.7 The Contractor will at all times during the Contract period employ sufficient persons of sufficient abilities and skills (including the methods and techniques required by the hazards likely to be encountered and methods of preventing accidents) for the proper performance of the Services.
- 8.1.8 A minimum of 3 persons should be employed in a tree work gang. In the event of an accident there should be someone present to render first aid or call assistance. Only people who are physically fit and competent should undertake work in trees or work with chainsaws. Work shall not be undertaken by persons under the influence of alcohol, or non-prescription drugs.
- 8.1.9 When a chainsaw is to be used the legs, feet and hands of the operator should be protected with chain-arresting materials e.g. ballistic nylon. Complying with British Standards BS EN 381. Eye and ear protection should be worn by chainsaw operators. ALL chainsaw operators should hold certificates of competence for use on the ground and operation of chain saws from ropes and harness up trees. Copies of these certificates must be made available to the Authorised Officer prior to the start of the contract; in addition two members of each work gang should be trained in aerial rescue technique. Evidence of such training will also be required.
- 8.1.10 Any persons working in trees should wear a safety helmet complying with British Standards 4423 1970. Persons working on the ground beneath trees should wear a helmet complying with British Standards 5240. Attention is also drawn to the protection of Eyes and Ears.

- 8.1.11 First Aid
- 8.1.12 Ideally all tree workers should be trained in first aid. At the very least, one member of every tree gang should be a competent first aider. An adequate first aid kit should be carried at all times.
- 8.1.13 Safety in Tree Works
- 8.1.14 Because of the inherent dangers of tree work it is essential that adequate safety precautions are taken. There are 4 elements of risk:
- The tree worker
 - The general public in the vicinity of the operations
 - Property and equipment
 - Traffic
- 8.1.15 Risk Assessments.
- 8.1.16 The Contractor will carry out Risk Assessments for all arboricultural operations. This will be carried out prior to work commencing. The outcome of such assessments should be taken into account in the working procedures employed on site.
- 8.1.17 Identification
- 8.1.18 Trees specified to receive work will be identified by house numbers where applicable, or by some other easily identifiable landmark, e.g. next to garden shed or adjacent to highway lamp post No 3, other trees will be identified on survey plans provided with the schedule of works. The Contractor will exercise great care to ensure that only the denoted trees are worked on. Should there be any doubt whatsoever, the Contractor will seek clarification from the Authorised Officer before proceeding.
- 8.1.18 Enquiries
- 8.1.19 Any member of the public making enquires to the Contractor regarding any aspect of work being undertaken will be politely referred to the Authorised Officer.
- 8.1.20 Working Practise
- 8.1.21 If work is not completed by the end of a working day the contractor will leave the site in a clean, tidy and safe condition.
- 8.1.22 Emergency Work
- 8.1.23 The contractor will have a system in place for responding to requests to carrying out tree works 24 hrs a day 7 days a week. Work will commence on site within two hours of a verbal order being issued by the authorised officer.

- 8.1.24 The Contractor will provide the Authorised Officer with a list of staff names and contact telephone numbers, to enable the Authorised Officer and his representative or the emergency services to notify the need for attendance on site.
- 8.1.25 The Contractor must maintain and administer its own system for responding to individual emergency calls.
- 8.1.26 Emergency works will be paid in accordance with the appropriate rates listed in the schedule.
- 8.1.27 Disposal of Materials
- 8.1.28 All arisings unless other wise stated by the Authorised Officer, are to be chipped on site and taken to a recycling centre approved by the AO.
- 8.1.29 Any material that cannot be chipped will become the responsibility of the Contractor to dispose of in an appropriate manner approved of by the authorised officer
- 8.1.30 Trees will fall into four categories:
- a) Small Up to 300mm Diameter
 - b) Medium 301mm – 600mm
 - c) Large 601mm – 900mm
 - d) Extra Large 901mm and over
- 8.1.31 The size of trees for the purpose of pricing will be determined by the diameter of the trunk measured at 1.5 meters.

8.2 Tree Felling

- 8.2.1 Trees will be felled, using sound arboricultural techniques and equipment suitable for the work.
- 8.2.2 All trees to be felled will be identified by the Authorised Officer.
- 8.2.3 The trees will be completely removed to ground level, unless otherwise stated by the Authorised Officer.

8.3 Coppicing

- 8.3.1 Coppicing means that the contractor will remove all the stem or stems down to approximately 15cm above ground. In the case of old coppice care should taken to avoid cutting below the previous coppice point. No chemicals should be applied to the cut stump.

8.4 Tree Stump Removal – Grass Areas

- 8.4.1 Where stump removal is specified, stumps will be ground down or removed to a minimum of 200mm below ground level; all Chippings will be removed from the site.
- 8.4.2 Any buttress or surface roots, or suckers arising from, or near, the base of the main trunk, will be included and removed as part of the stump removal operation.
- 8.4.3 All stump removal operations must be carried out within 24 hours of felling a tree, unless specified by the Authorised Officer.
- 8.4.4 Where stumps are removed, the excavated area must be backfilled, firmed and made level with good quality topsoil complying with British Standards 3882. Unless otherwise specified grass seed will be applied in accordance with British Standards 4428:1989

8.5 Tree Stump Removal – Hard Surfaces

- 8.5.1 Where stump removal is specified, stumps will be ground down or removed to a minimum of 200mm below ground level; all chippings will be removed from the site.
- 8.5.2 Any buttress or surface roots, or suckers arising from, or near, the base of the main trunk, will be included and removed as part of the stump removal operation.
- 8.5.3 All stump removal operations must be carried out within 24 hours of felling a tree, unless specified by the Authorised Officer.
- 8.5.4 Where stumps are removed, the excavated area must be backfilled with Type 1 Stone and compacted to within 25mm of the surrounding level and topped with farmacadam to leave a flat even finish.

8.6 Stump Killing

- 8.6.1 Where stumps are to be killed, appropriate chemicals should be applied to stumps as soon after felling as possible. Solutions or crystals of the chemical should be applied to the cut stump surface, especially the cambium layer, and the bark.
- 8.6.2 All chemicals should be used strictly in accordance with manufacturer's recommendations. Operators should hold a certificate of competence for the use of pesticides; copies of these certificates must be made available to the Authorised Officer, prior to the start of the contract.

8.7 Climbing Inspections

- 8.7.1 The contractor will arrange for a climbing inspection of the tree (or trees) to be carried out by a competent Arborist who will provide a report to the Authorised Officer.

8.8 Ivy Cutting

- 8.8.1 This operation will be specified where it is not necessary to remove all the ivy but to prevent the continued growth a section of 900mm in height from the base shall be cleared all the way round the trunk. The contractor shall use only non-mechanical tools for this operation.

8.9 Ivy Removal

- 8.9.1 This operation will completely remove all Ivy from the tree. The contractor shall use only non-mechanical tools for this operation.

8.10 Formative Pruning

- 8.10.1 The Contractor will carry out corrective and formative pruning to remove competing leaders and undesirable branch structures in order to produce trees of the desired form. This work will influence the eventual shape and form of the trees in maturity. On completion of this work the trees will exhibit a balanced and even character in keeping with the species and varieties concerned.

8.11 Removal of Dead Wood

- 8.11.1 Unless otherwise specified, this refers to the removal of all dead, diseased and dying branches, wood and broken stumps, throughout the Crown.

8.12 Initial Pollarding

- 8.12.1 Pollarding will be used as a management technique to regulate the size and shape of the tree to develop the branch framework with cyclic pruning resulting in a "pollarding head". This technique is only suitable on certain species e.g. Tilia, Platanus, Salix. Pollarding should not be confused with the unacceptable practice of topping.

- 8.12.2 The Contractor will reduce the whole crown to points, determined by the AO, on the forks off the main stem.

8.13 Re-Pollarding

8.13.1 The Contractor will remove the whole crown by 100% back to previous pollard points

8.14 Removal of Epicormic Growth

8.14.1 The Contractor will remove all sucker growth and/or epicormic shoots from the root, buttresses and bole up to the main fork. All cuts should be made level with the source of the stem or root. Epicormic removal operations will be carried out using only non-mechanical tools.

8.15 Crown Lifting

8.15.1 The Contractor will remove complete limbs and/or small branches as appropriate to increase the clearance between ground level and the lower branches, maintaining a balanced well-shaped crown, conducive to the future growth and development of the tree, in keeping with the species and varieties concerned.

8.16 Crown Thin

8.16.1 The Contractor will remove all dead dying or diseased wood, the Contractor will remove a proportion of secondary and small live branch growth throughout the crown, to produce an even density of foliage around a well spaced and balanced branch structure as far as possible. Crossing, weak, duplicated and damaged branches will be removed where this will not spoil the overall shape.

8.17 Crown Reduction

8.17.1 The Contractor will reduce the height and spread of specified trees by cutting each branch back to a side bud or branch to leave a flowing line without stumps. Following this work the trees must exhibit well-balanced and even crown characteristic of the species or variety concerned. In order to achieve a satisfactory finish the Contractor will be expected to incorporate a suitable amount of crown lifting and thinning as part of the work on each tree being reduced. 10%-30%

8.18 Reduce from overhead obstruction

8.18.1 Means that the contractor will reduce branches away from a specified overhead obstructions e.g. a roof, phone wires, electricity wires. Where at all possible cutting back to a suitable side bud or branch.

8.19 Restoration/storm damage/fallen branches

8.19.1 This consists of the careful treatment of otherwise healthy trees, which have been damaged by gales, vandalism or vehicle impact. Work will

include the removal of damaged and fallen branches, thinning of new shoots on sound wood and the encouragement of new leading shoots where appropriate in order to restore the tree's natural shape.

8.20 Branch Removal

- 8.20.1 The Contractor will remove specific limbs as specified by the Authorised Officer.

8.21 Root Pruning

- 8.21.1 This will only be carried out where roots of individual trees have been damaged, are raising footways or where root action has been implicated in an insurance claim. Individual trees to be root pruned will be agreed on site with the Authorised Officer in each case. Final cuts will be made cleanly into sound tissue. Other operations, extent of work and individual rates will be agreed with the Authorised Officer.

8.22 Tree Planting - Standard & Extra Heavy Standard

- 8.22.1 Unless alternative dimensions have been approved by the Authorised Officer, each pit will be at least twice the size of the root ball/container to accommodate the entire root without restriction, in all cases the bottom of the pit needs to be broken up with a fork. The contractor should allow in his rates to include a perforated watering tube, approved by the AO, to be installed in every tree pit.

- 8.22.2 All trees (provided by Cherwell District Council) shall be positioned in the planting pit to their natural depth, so that the nursery root collar is level with the surface of the ground. Any broken or damaged roots or shoots shall be pruned to sound wood. The stake and the tree should be presented in the planting pit before planting commences to ensure that they both fit within the tree pit. The tree shall be placed in position parallel to the stake to provide the most satisfactory appearance whichever staking method is specified. The roots shall be spread out ready for the back-fill mixture (in the case of bare root stock). The tree roots will be covered by the planting mixture and the tree shaken gently so that all the spaces around the roots are filled. The remaining back-fill will be added in layers of 150mm deep. At each stage it should be firmly consolidated to eliminate air pockets under and around the root system. Any surplus backfill to be removed from site and disposed of. Following planting any settlement that occurs shall be made up at the contractor's expense.

8.23 Tree Planting - Feathered

- 8.23.1 The contractor must excavate a pit at least 75mm greater than the depth and width of the roots and be at least 300mm square and deep. The stake and the tree should be presented in the planting pit before planting commences to ensure that they both fit within the tree pit. The tree shall be placed in position parallel to the stake to provide the most satisfactory appearance. The stake must be positioned on the leeward side of the tree.

Side shoots that impede the effective attachment of the stake must be removed cleanly with appropriate tools.

8.24 Tree Planting – Whips

8.24.1 The Contractor will plant whips (provided by Cherwell District Council) using a straight backed planting spade, the slit must be made in the ground to the full depth of the spade and a second slit made joining the first forming a L shape. The soil will then be lifted by levering the spade backwards; the tree shall be inserted into the notch produced at greater depth than required. The spade must then be removed from the soil and the tree pulled upwards (without stripping the roots) to bring it to the correct nursery collar level. The tree will then be firmed into the ground.

8.25 Single Stake Method

8.25.1 The stakes should be 2400 mm long (2000mm in the case of feathered trees) by 60mm diameter positioned upright, normally on the windward side of the tree. A minimum of 600mm of the stake shall be driven into undisturbed ground. The stake shall be driven into the ground before planting commences.

8.25.2 All stakes supplied for tree planting shall be tanalised. They should be round free of noticeable distortions, pointed at one end and of uniform thickness with a minimum of 60mm and a maximum of 75mm in diameter.

8.25.3 Each tree tie will include a rubber resilience spacer to prevent chaffing between the tree and stake. Where necessary an additional spacer shall be fitted if the tree has a kinked stem

8.25.4 All tree ties will be of an expandable rubber type, approved by the Authorised Officer. All ties to be secured with a galvanised nail.

8.26 Double Stakes

8.26.1 The stakes should be 2400 mm long by 60mm diameter positioned upright. The Stakes will be 2400mm long and set upright, normally on the windward side of the tree. A minimum of 600mm of the stake shall be driven into undisturbed ground. The stakes should be positioned outside of the root ball of the tree. A cross bar of wood will be attached between the stakes, or loops of rubber and spacers attached to each stake as specified by the Authorised Officer. The stake shall be driven into the ground before planting commences.

8.26.2 All stakes supplied for tree planting shall be tanalised. They should be round free of noticeable distortions, pointed at one end and of uniform thickness with a minimum of 60mm and a maximum of 75mm in diameter.

8.26.3 Rubber spacers and tie will be attached to the cross bar to hold the tree in place and prevent chaffing of the trees bark. Where necessary an additional spacer shall be fitted if the tree has a kinked stem

8.26.4 All tree ties will be of an expandable rubber type, approved by the Authorised Officer. All ties to be secured with a galvanised nail.

8.27 Removal stakes ties and guards

8.27.1 If fitted means that the Contractor will completely remove trees/stakes and guards, and will fill the resultant holes with good quality topsoil lightly compacted. Disposal of the trees/stakes and guards will be the responsibility of the Contractor.

8.28 Re-tie – Single/Double Staked Tree

8.28.1 The Contractor shall supply and fit replacement tie/ties to a young tree, which has come adrift from its stake.

8.29 Removal of Vandallised Standard Tree

8.29.1 The contractor will remove all parts of the tree, stake, tie and guard and backfill any holes with suitable material and lightly compact.

8.30 Mulch

8.30.1 The contractor will apply a layer of mulch around the base of the tree to a depth of 100 mm to a distance of 1m away from the trunk of the tree.

8.31 Irrigation

8.31.1 The Contractor will water trees to field capacity as required to achieve good establishment and maintain healthy growth.

8.32 Normal Day Rate

8.32.1 The Contractor will provide a three man crew, vehicle and machinery to perform arboricultural operations between the hours of 07:30 and 18:30 Monday to Friday.

8.33 Out of Hours Rate

8.33.1 The Contractor will provide a three-man crew, vehicle and machinery to perform arboricultural operations out of hours as requested by the Authorised Officer.

8.34 Young Tree Maintenance

8.34.1 On a monthly basis the contractor will make a maintenance visit to all trees specified in the schedules. During the visit the contractor will ensure that:

- a) the tree pit is kept weed and litter free.
- b) the circular mulch base is maintained at 100mm in depth and 2.0m in diameter.
- c) any dead, dying, damaged or diseased branches are removed with all pruning undertaken in accordance with BS3998:2010
- d) the cage & pins / underground guys / stakes are upright, level, checked for stability and repaired as necessary
- e) the ties are checked for looseness / tightness and adjusted or replaced as necessary.

8.34.2 In addition to the above, during the months of April to September inclusive each tree receives irrigation to field capacity on two occasions. Unless instructed otherwise by the Authorised Officer, the contractor will programme the timing of each visit for the first and third week of each month.

8.34.2 The contractor is to immediately notify the Authorised Officer of any tree included within the schedule which appears to be in poor health or has suffered from recent damage or vandalism.

8.34.3 Any trees specified in the schedules to receive young tree maintenance which fail for any reason other than vandalism will be removed and replaced during the first available planting season at the contractors own expense. Any replacements must be purchased from an agreed supplier and be of the same size and quality as originally supplied by the Council unless otherwise approved by the Authorised Officer.

SECTION 9
LANDSCAPE
DEVELOPMENT
WORKS

9.0 TURFING AND GRASS SEEDING

9.1 General Conditions

- 9.1.1 All work specified shall be carried out in accordance with B.S. 4428 – 1989 General Landscape Operations, Section 6. Turf shall be in accordance with B.S. 3969 Recommendations for Turf for General Landscape Purposes.
- 9.1.2 Turf should not, unless otherwise instructed by the Authorised Officer, contain weed grasses such as Annual Meadow Grass, Cocksfoot, Creeping Soft Grass, Meadow Barley, Yorkshire Fog or Perennial Weeds.
- 9.1.3 The soil of the turf should be medium loam and free from stones over 15mm gauge. Soil may vary from heavy to light loam but should be consistent in character for the whole of each requirement.
- 9.1.4 Turf should be of a rectangular shape and of uniform thickness. Unless otherwise agreed, they should have a minimum thickness of 25mm.
- 9.1.5 The grass should be close texture, of even density and green in colour. The turf should be sufficiently fibrous for turf to hold together when handled, but excess mat or fibre is undesirable. The grass should have been closely mown. It should not be affected by any pests or diseases. The standard and quality of turf required for the job shall be agreed with the Authorised Officer and paid for in accordance with the Schedule of Rates. (See Appendix in the schedules)
- 9.1.6 Turf should not be stacked for longer than 3days unless agreed with the Authorised Officer. When turfing large areas supplies of turf should be delivered at appropriate intervals throughout the work, so as to avoid stacking turf for longer periods. Turf unloaded by hand should not be stacked higher than 1 metre and appropriate measures should be taken to prevent any inconvenience or danger to the public.
- 9.1.7 Establishment Period - Seeding and Turfing
- 9.1.8 The Contractor will establish a good sward of the specified mixture free from pernicious weeds. During the period of establishment all newly grassed areas shall be cut twice, each cut reducing the growth height by half. The first and second cuts shall take place when the growth height reaches 75mm. Cutting must be undertaken using an approved mowing machine when conditions are not excessively wet or damp. The Contractor must remove all stones and other deleterious material from site, prior to grass cutting operations.
- 9.1.9 Thereafter the areas shall be treated as per their appropriate specification i.e., Sports turf, amenity turf etc., and incorporated into regular maintenance schedules.

9.2 Initial Ground Preparation for Turf or Seed

- 9.2.1 The topsoil shall be cultivated to a depth of 125mm avoiding the disturbance of the subsoil by mechanical means or by hand cultivation on banks or confined areas as approved by the Authorised Officer. All stones, weeds, roots and other deleterious materials which are brought to the surface shall be removed from site and disposed of.
- 9.2.2 Soil must be cultivated to a friable tilth and include treading, firming and raking to a level soil surface by methods to be approved by the Authorised Officer. Where applicable the degree of accuracy in determining a level profile shall be determined by boning rods and/or site levels after firming in accordance with B.S. 4428.
- 9.2.3 Unless otherwise specified all areas to be seeded or turfed will have a base dressing of an approved granular pre-seeding fertiliser in the ratio of 10:12:15 (N.P.K.), applied at the rate of 40 grammes per square metre. The dressing shall be applied by means of approved fertiliser distributor machinery or by hand in small or confined areas, and then lightly worked into the surface with a harrow or rake.
- 9.2.4 Operations must not be carried out during periods of inclement weather, i.e., when the ground is wet, frosty or waterlogged. Timing of operations will generally be confined to the Spring and Autumn periods or as instructed by the Authorised Officer in accordance with specifications.

9.3 Turf Laying

- 9.3.1 The Contractor shall only lay turf when weather and soil conditions are suitable, normally between October - April. Turf should not be laid in exceptionally dry or frosty conditions.
- 9.3.2 Turf should not be laid until the topsoiling in whole or in part has been satisfactorily completed by being brought to an even tilth and firmness. Turf from the stack should be wheeled across site on planks laid closely side by side. Adequate timber planks should be used to support workmen and barrows, and provide access. Turf should be laid on the prepared soil bed and firmed into position in consecutive rows with broken joints (as in stretcher bond brickwork), closely butted and to the correct levels.
- 9.3.3 The turf should be laid off planks working over turf previously laid. Where necessary, the turf should be lightly and evenly firmed with wooden beaters, the bottom of the beaters being frequently scraped clean of accumulated soil or mud. Where specified by the Authorised Officer, a dressing of finely sifted topsoil (complying with B.S. 3882 "Recommendations for Classification of Topsoil") or fine peat should be applied and well brushed into joints. Any inequalities in finished levels owing to variation in turf thickness or uneven consolidation of soil should be adjusted by raking and/or by packing fine soil under the turf. A roller should not normally be used. The finished level of the turf should conform

landscape planning • ecology • arboriculture

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